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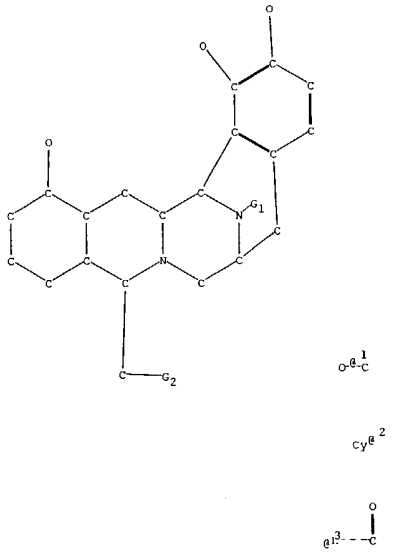
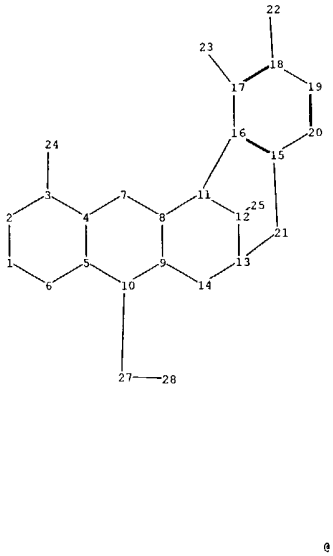
UPDATED





chain nodes :
22 23 24 25 27 28 29 31 34
ring nodes :
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21
ring/chain nodes :
30 32 33
chain bonds :
3-24 10-27 12-25 17-23 18-22 27-28 29-30 32-33 33-34
ring bonds :
1-2 1-6 2-3 3-4 4-5 4-7 5-6 5-10 7-8 8-9 8-11 9-10 9-14 11-12 11-16 12-13
13-14 13-21 15-16 15-20 15-21 16-17 17-18 18-19 19-20
exact/norm bonds :
1-2 1-6 2-3 3-4 3-24 4-5 4-7 5-6 5-10 7-8 8-9 8-11 9-10 9-14 11-12 11-16
12-13 12-25 13-14 13-21 15-21 17-23 18-22 27-28 29-30 32-33 33-34
exact bonds :
10-27
normalized bonds :
15-16 15-20 16-17 17-18 18-19 19-20
isolated ring systems :
containing 1 :

G1:H,CH3

G2:H,OH,[*1],[*2],[*3]

Match level :
1:Atom 2:Atom 3:Atom 4:Atom 5:Atom 6:Atom 7:Atom 8:Atom 9:Atom 10:Atom 11:Atom
12:Atom 13:Atom 14:Atom 15:Atom 16:Atom 17:Atom 18:Atom 19:Atom 20:Atom 21:Atom
22:CLASS 23:CLASS 24:CLASS 25:CLASS 27:CLASS 28:CLASS 29:CLASS 30:CLASS 31:Atom
32:CLASS 33:CLASS 34:CLASS
Generic attributes :
31:
Saturation : Unsaturated

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FULL SCREEN SEARCH COMPLETED -     674 TO ITERATE

100.0% PROCESSED     674 ITERATIONS                          162 ANSWERS
SEARCH TIME: 00.00.01

L3          162 SEA SSS FUL L1

=> file caplus
COST IN U.S. DOLLARS                                SINCE FILE      TOTAL
                                                       ENTRY    SESSION
FULL ESTIMATED COST                                   170.75     171.23

FILE 'CAPLUS' ENTERED AT 13:27:13 ON 30 APR 2004
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FILE COVERS 1907 - 30 Apr 2004  VOL 140 ISS 19
FILE LAST UPDATED: 29 Apr 2004  (20040429/ED)

  This file contains CAS Registry Numbers for easy and accurate
  substance identification.


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L4          22 L3

=> d l4 1-22 bib abs hitstr
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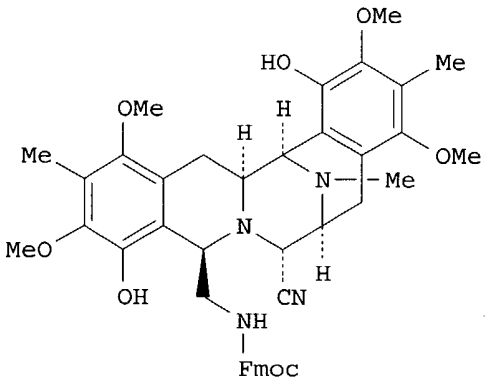
L4 ANSWER 1 OF 22 CAPLUS COPYRIGHT 2004 ACS on STN
AN 2002:765217 CAPLUS
DN 138:14135
TI A Solid-Supported, Enantioselective Synthesis Suitable for the Rapid Preparation of Large Numbers of Diverse Structural Analogues of (-)-Saframycin A
AU Myers, Andrew G.; Lanman, Brian A.
CS Department of Chemistry and Chemical Biology, Harvard University, Cambridge, MA, 02138, USA
SO Journal of the American Chemical Society (2002), 124(44), 12969-12971
CODEN: JACSAT; ISSN: 0002-7863
PB American Chemical Society
DT Journal
LA English
OS CASREACT 138:14135
GI



I

AB A 10-step solid-supported, enantioselective synthesis suitable for the rapid preparation of large nos. of diverse structural analogs of saframycin A is described. The synthetic route, which bears analogy to solid-phase peptide synthesis, involves the directed condensation of N-protected α-amino aldehyde reactants, e.g. N-Fmoc-glycinal (Fmoc = 9-fluorenylmethoxycarbonyl). A novel dual linker, (S)-2-[4-(tert-butyldimethylsilyloxy)-1-butyl]morpholine, was developed for attachment of intermediates to the solid support via a C-protective group, a substituted morpholino nitrile derivative The route employs a novel diastereospecific cyclorelease mechanism, supports structural variation at multiple sites in the saframycin core, and obviates the need for chromatog. purification of the products or any intermediate. To demonstrate the feasibility of structural variation at multiple sites, a matrix of 16 saframycin A analogs, e.g. I, was prepared by parallel synthesis with simultaneous variation of two sites. This work is notable not only as a preliminary step toward large-scale library construction but also as an example of the use of sequential stereoselective C-C bond-forming reactions on the solid phase for the preparation of natural product analogs.

IT **253329-76-9P 429687-34-3P 429687-39-8P 477566-56-6P 477566-57-7P**
RL: SPN (Synthetic preparation); PREP (Preparation)
(asym. synthesis of (-)-saframycin A analogs via solid-supported combinatorial chemical using a directed condensation of N-protected amino

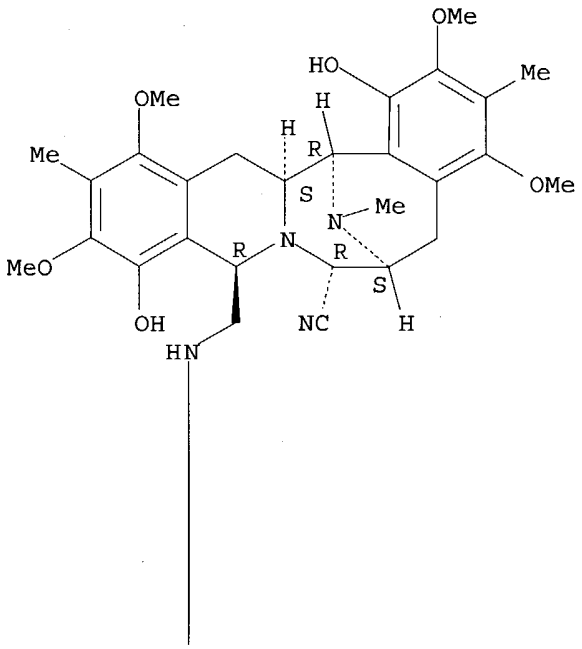
aldehydes with (silyloxybutyl)morpholine dual linker and Pictet-Spengler cyclization)

RN 253329-76-9 CAPLUS

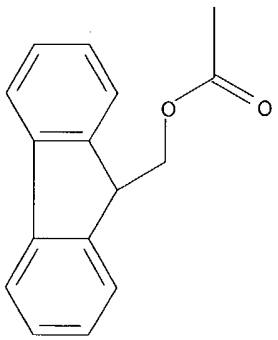
CN Carbamic acid, [[(6S,7R,9R,14aS,15R)-7-cyano-6,7,9,14,14a,15-hexahydro-1,10-dihydroxy-2,4,11,13-tetramethoxy-3,12,16-trimethyl-6,15-imino-5H-isoquino[3,2-b][3]benzazocin-9-yl]methyl]-, 9H-fluoren-9-ylmethyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A



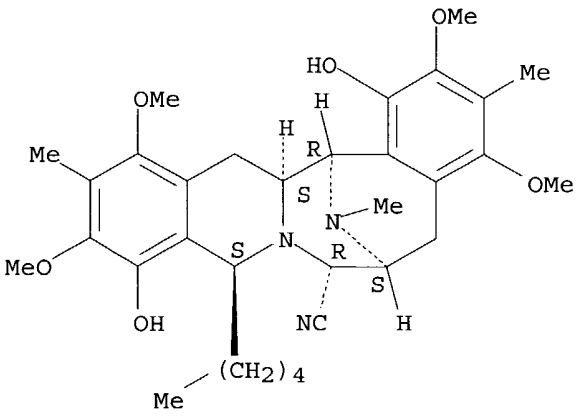
PAGE 2-A



RN 429687-34-3 CAPLUS

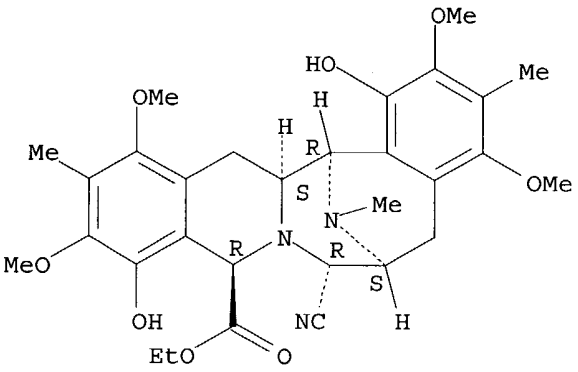
CN 6,15-Imino-5H-isoquino[3,2-b][3]benzazocine-7-carbonitrile, 6,7,9,14,14a,15-hexahydro-1,10-dihydroxy-2,4,11,13-tetramethoxy-3,12,16-trimethyl-9-pentyl-, (6S,7R,9S,14aS,15R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



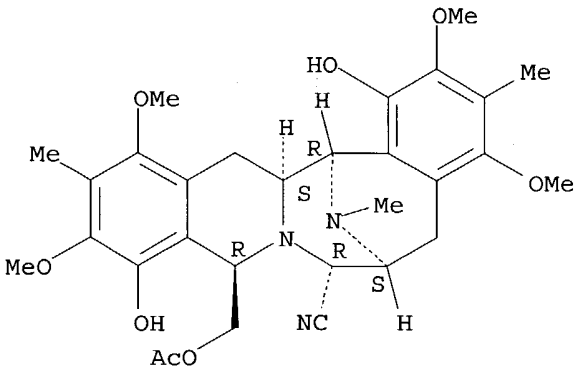
RN 429687-39-8 CAPLUS
CN 6,15-Imino-5H-isoquino[3,2-b][3]benzazocine-9-carboxylic acid, 7-cyano-6,7,9,14,14a,15-hexahydro-1,10-dihydroxy-2,4,11,13-tetramethoxy-3,12,16-trimethyl-, ethyl ester, (6S,7R,9R,14aS,15R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



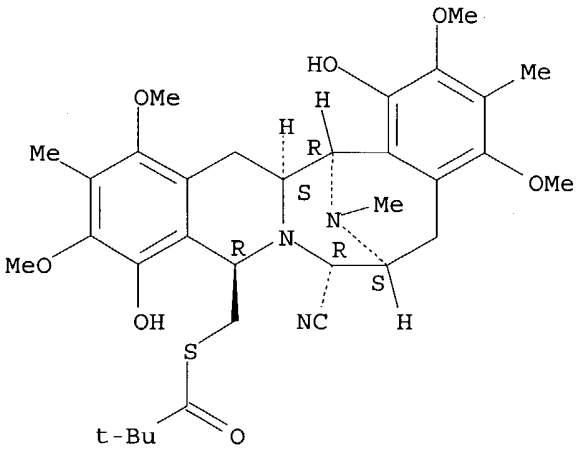
RN 477566-56-6 CAPLUS
CN 6,15-Imino-5H-isoquino[3,2-b][3]benzazocine-7-carbonitrile, 9-[(acetyloxy)methyl]-6,7,9,14,14a,15-hexahydro-1,10-dihydroxy-2,4,11,13-tetramethoxy-3,12,16-trimethyl-, (6S,7R,9R,14aS,15R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



RN 477566-57-7 CAPLUS
CN Propanethioic acid, 2,2-dimethyl-, S-[[(6S,7R,9R,14aS,15R)-7-cyano-6,7,9,14,14a,15-hexahydro-1,10-dihydroxy-2,4,11,13-tetramethoxy-3,12,16-trimethyl-6,15-imino-5H-isoquino[3,2-b][3]benzazocin-9-yl]methyl] ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.



RE.CNT 19 THERE ARE 19 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 2 OF 22 CAPLUS COPYRIGHT 2004 ACS on STN
AN 2002:391711 CAPLUS
DN 136:401914
TI Preparation of saframycin analogs for pharmaceutical use in the treatment of cancer
IN Myers, Andrew; Plowright, Alleyn T.; Kung, Daniel W.; Lanman, Brian; Barbay, Joseph; Xing, Chengguo
PA President and Fellows of Harvard College, USA
SO PCT Int. Appl., 203 pp.
CODEN: PIXXD2
DT Patent
LA English
FAN.CNT 1

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	RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
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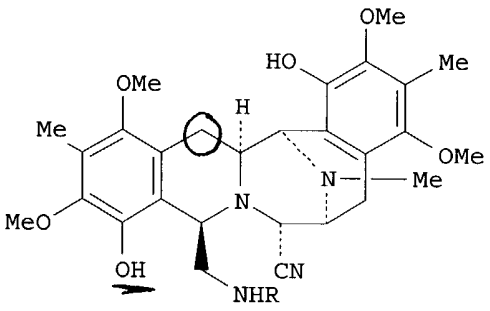
GI



I

AB Saframycin analogs, such as I [R = H, alkyl, acyl, arylacyl, heteroarylacyl, carboxy, arylsulfonyl, etc.], were prepared for therapeutic use as antitumor agents. Thus, I (R = 2-furanylmethyl) was prepared in 95% yield via condensation of 2-furancarboxaldehyde with the corresponding amine I (R = NH2) using sodium triacetoxyborohydride in MeCN. The amine I (R = H) was prepared via a stereoselective sequence of solid phase synthetic steps. The prepared saframycin analogs were assayed for cancer cell growth inhibition of A375 malignant melanoma and A-459 lung carcinoma cell lines.

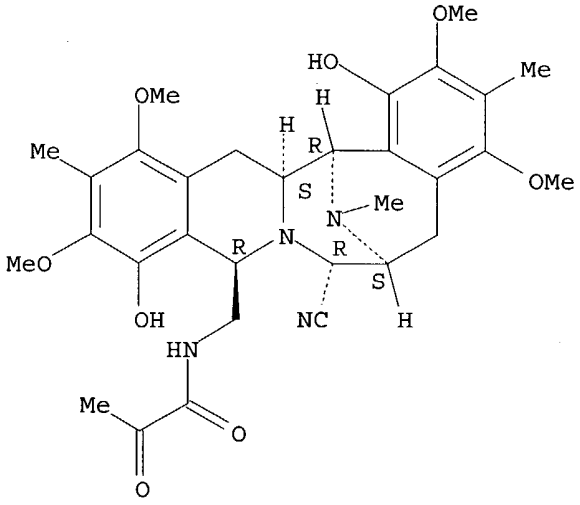
IT **253329-80-5P 349103-40-8P 429687-32-1P**

RL: PAC (Pharmacological activity); RCT (Reactant); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); RACT (Reactant or reagent); USES (Uses)
(preparation of saframycin analogs for pharmaceutical use in the treatment of cancer)

RN 253329-80-5 CAPLUS

CN Propanamide, N-[[(6S,7R,9R,14aS,15R)-7-cyano-6,7,9,14,14a,15-hexahydro-1,10-dihydroxy-2,4,11,13-tetramethoxy-3,12,16-trimethyl-6,15-imino-5H-isoquino[3,2-b][3]benzazocin-9-yl]methyl]-2-oxo- (9CI) (CA INDEX NAME)

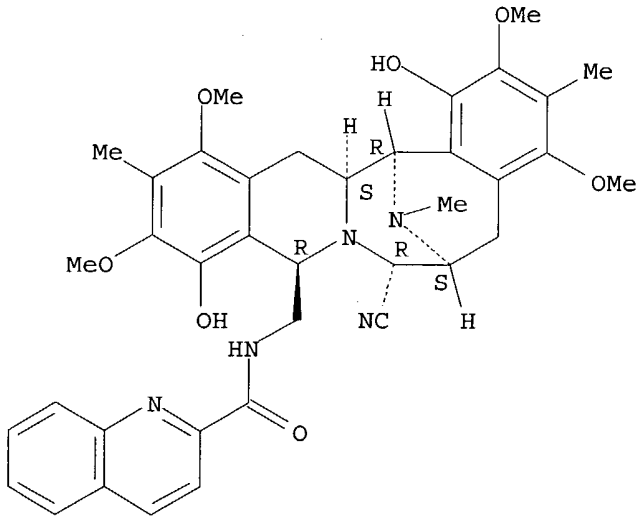
Absolute stereochemistry.



RN 349103-40-8 CAPLUS

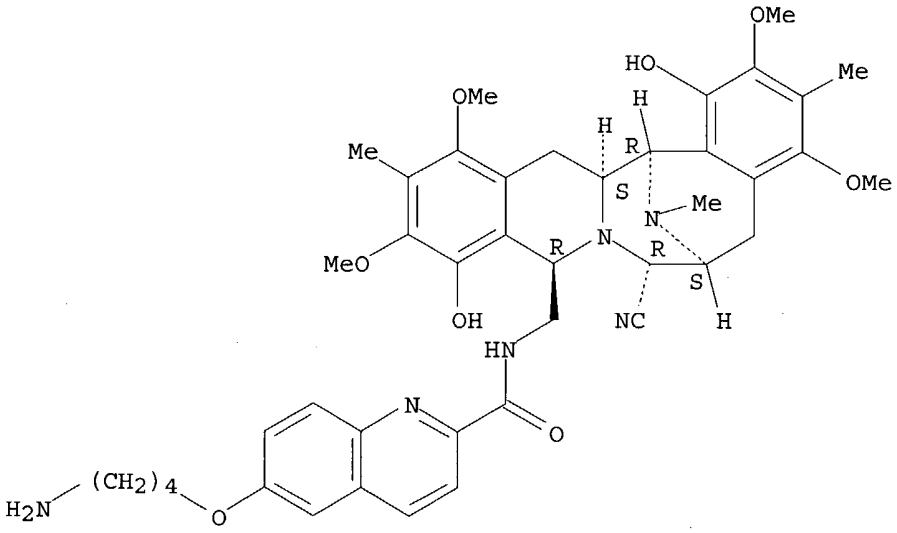
CN 2-Quinolinecarboxamide, N-[[(6S,7R,9R,14aS,15R)-7-cyano-6,7,9,14,14a,15-hexahydro-1,10-dihydroxy-2,4,11,13-tetramethoxy-3,12,16-trimethyl-6,15-imino-5H-isoquino[3,2-b][3]benzazocin-9-yl]methyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



RN 429687-32-1 CAPLUS
CN 2-Quinolinecarboxamide, 6-(4-aminobutoxy)-N-[[(6S,7R,9R,14aS,15R)-7-cyano-6,7,9,14,14a,15-hexahydro-1,10-dihydroxy-2,4,11,13-tetramethoxy-3,12,16-trimethyl-6,15-imino-5H-isoquino[3,2-b][3]benzazocin-9-yl]methyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



IT **253329-76-9P 349103-36-2P 349103-37-3P**
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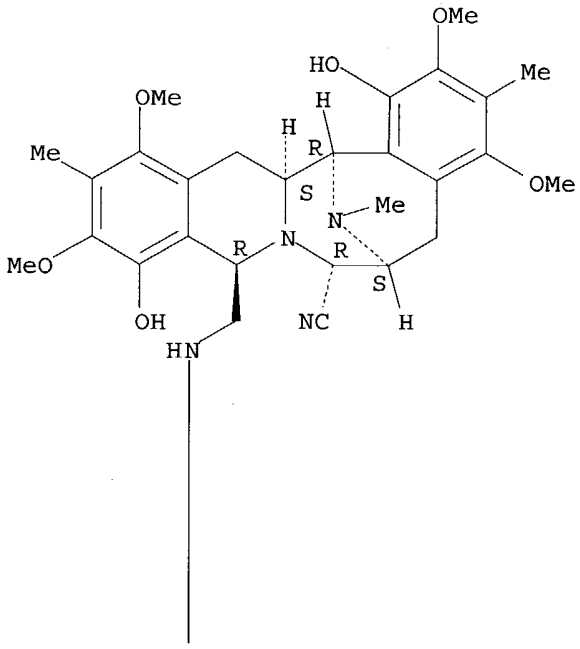
429687-39-8P
RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(preparation of saframycin analogs for pharmaceutical use in the treatment of cancer)

RN 253329-76-9 CAPLUS
CN Carbamic acid, [[(6S,7R,9R,14aS,15R)-7-cyano-6,7,9,14,14a,15-hexahydro-1,10-dihydroxy-2,4,11,13-tetramethoxy-3,12,16-trimethyl-6,15-imino-5H-

isoquino[3,2-b][3]benzazocin-9-yl]methyl]-, 9H-fluoren-9-ylmethyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A



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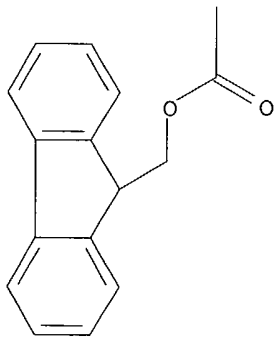
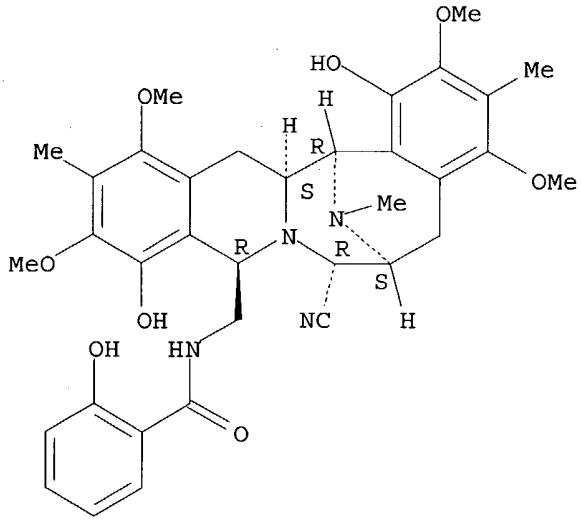


RN 349103-36-2 CAPLUS

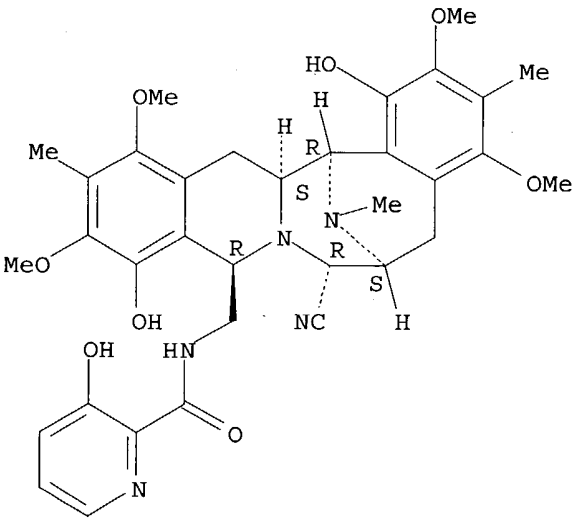
CN Benzamide, N-[[(6S,7R,9R,14aS,15R)-7-cyano-6,7,9,14,14a,15-hexahydro-1,10-dihydroxy-2,4,11,13-tetramethoxy-3,12,16-trimethyl-6,15-imino-5H-isoquino[3,2-b][3]benzazocin-9-yl]methyl]-2-hydroxy- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



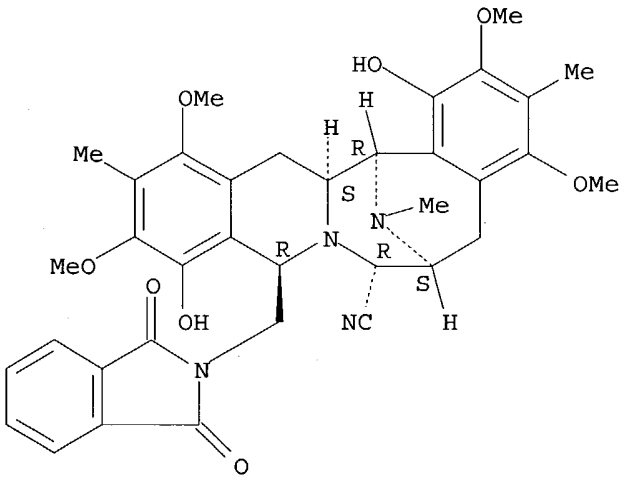
RN 349103-37-3 CAPLUS
CN 2-Pyridinecarboxamide, N-[[(6S,7R,9R,14aS,15R)-7-cyano-6,7,9,14,14a,15-hexahydro-1,10-dihydroxy-2,4,11,13-tetramethoxy-3,12,16-trimethyl-6,15-imino-5H-isoquino[3,2-b][3]benzazocin-9-yl]methyl]-3-hydroxy- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



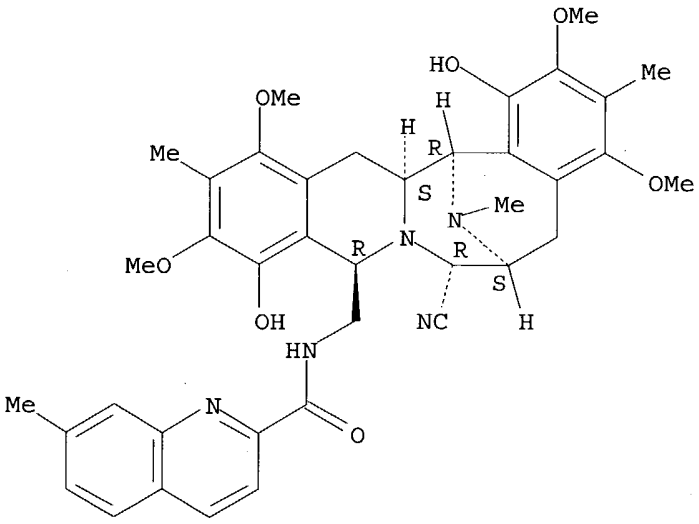
RN 349103-39-5 CAPLUS
CN 6,15-Imino-5H-isoquino[3,2-b][3]benzazocine-7-carbonitrile, 9-[(1,3-dihydro-1,3-dioxo-2H-isoindol-2-yl)methyl]-6,7,9,14,14a,15-hexahydro-1,10-dihydroxy-2,4,11,13-tetramethoxy-3,12,16-trimethyl-, (6S,7R,9R,14aS,15R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



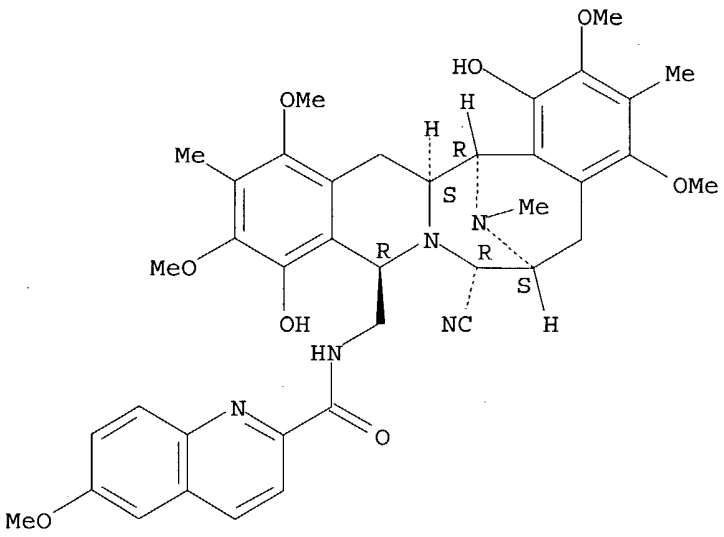
RN 349103-41-9 CAPLUS
CN 2-Quinolinecarboxamide, N-[[(6S,7R,9R,14aS,15R)-7-cyano-6,7,9,14,14a,15-hexahydro-1,10-dihydroxy-2,4,11,13-tetramethoxy-3,12,16-trimethyl-6,15-imino-5H-isoquino[3,2-b][3]benzazocin-9-yl]methyl]-7-methyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



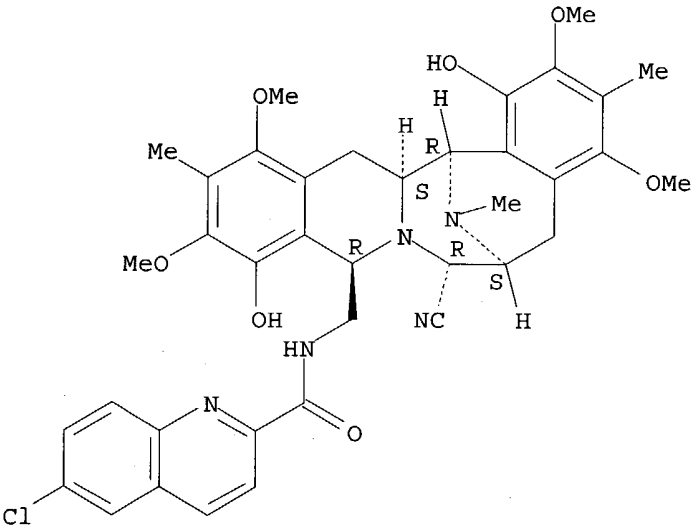
RN 349103-42-0 CAPLUS
CN 2-Quinolinecarboxamide, N-[[(6S,7R,9R,14aS,15R)-7-cyano-6,7,9,14,14a,15-hexahydro-1,10-dihydroxy-2,4,11,13-tetramethoxy-3,12,16-trimethyl-6,15-imino-5H-isoquino[3,2-b][3]benzazocin-9-yl]methyl]-6-methoxy- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



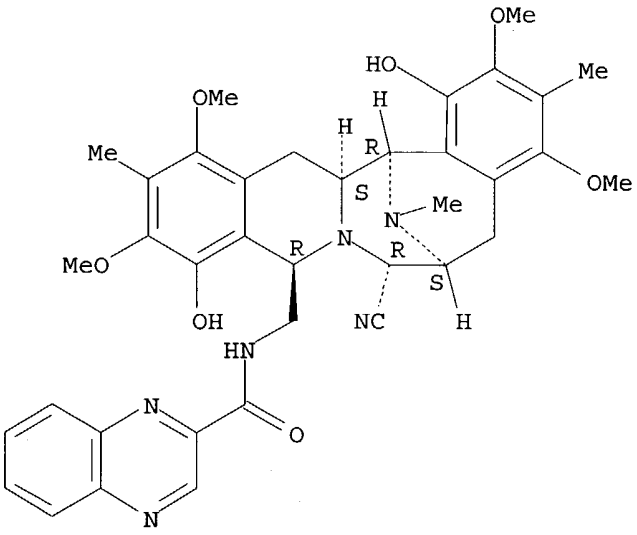
RN 349103-43-1 CAPLUS
CN 2-Quinolinecarboxamide, 6-chloro-N-[[(6S,7R,9R,14aS,15R)-7-cyano-6,7,9,14,14a,15-hexahydro-1,10-dihydroxy-2,4,11,13-tetramethoxy-3,12,16-trimethyl-6,15-imino-5H-isoquino[3,2-b][3]benzazocin-9-yl]methyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



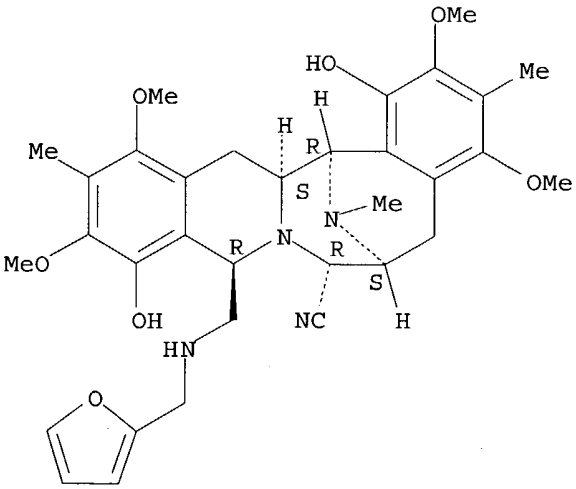
RN 349103-44-2 CAPLUS
CN 2-Quinoxalinecarboxamide, N-[[(6S,7R,9R,14aS,15R)-7-cyano-6,7,9,14,14a,15-hexahydro-1,10-dihydroxy-2,4,11,13-tetramethoxy-3,12,16-trimethyl-6,15-imino-5H-isoquino[3,2-b][3]benzazocin-9-yl]methyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



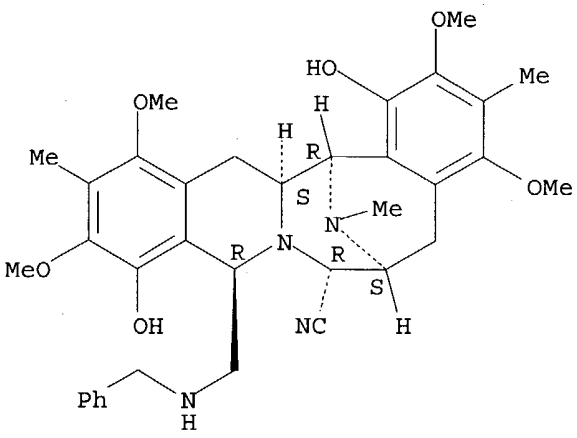
RN 349103-48-6 CAPLUS
CN 6,15-Imino-5H-isoquino[3,2-b][3]benzazocine-7-carbonitrile, 9-[[(2-furanylmethyl)amino]methyl]-6,7,9,14,14a,15-hexahydro-1,10-dihydroxy-2,4,11,13-tetramethoxy-3,12,16-trimethyl-, (6S,7R,9R,14aS,15R)-(9CI) (CA INDEX NAME)

Absolute stereochemistry.



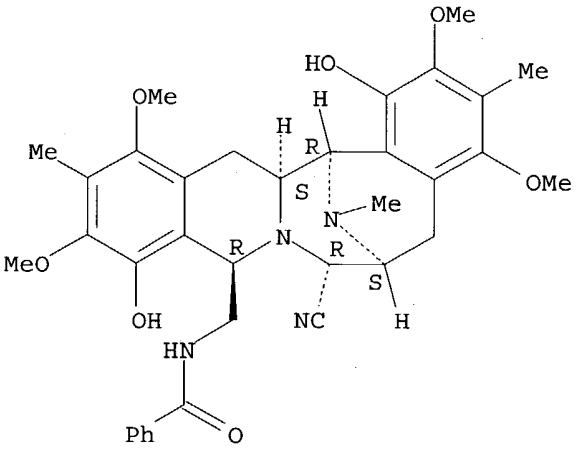
RN 349103-49-7 CAPLUS
CN 6,15-Imino-5H-isoquino[3,2-b][3]benzazocine-7-carbonitrile, 6,7,9,14,14a,15-hexahydro-1,10-dihydroxy-2,4,11,13-tetramethoxy-3,12,16-trimethyl-9-[[(phenylmethyl)amino]methyl]-, (6S,7R,9R,14aS,15R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



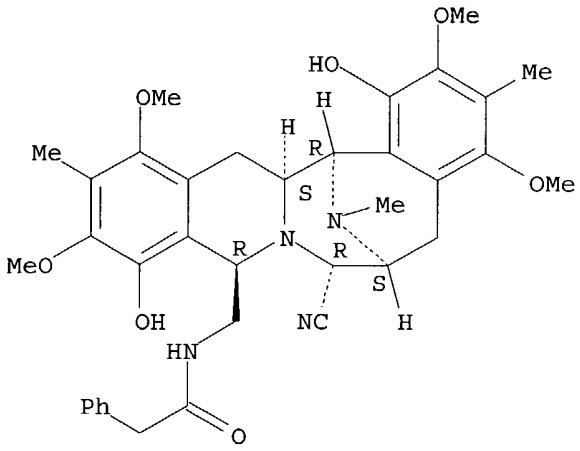
RN 349103-50-0 CAPLUS
CN Benzamide, N-[[(6S,7R,9R,14aS,15R)-7-cyano-6,7,9,14,14a,15-hexahydro-1,10-dihydroxy-2,4,11,13-tetramethoxy-3,12,16-trimethyl-6,15-imino-5H-isoquino[3,2-b][3]benzazocin-9-yl]methyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



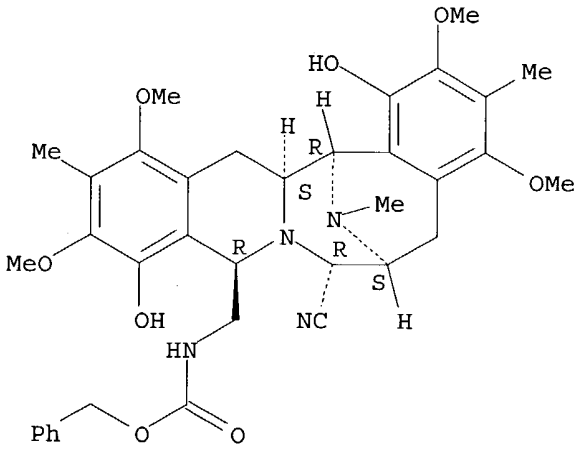
RN 349103-51-1 CAPLUS
CN Benzeneacetamide, N-[[(6S,7R,9R,14aS,15R)-7-cyano-6,7,9,14,14a,15-hexahydro-1,10-dihydroxy-2,4,11,13-tetramethoxy-3,12,16-trimethyl-6,15-imino-5H-isoquino[3,2-b][3]benzazocin-9-yl]methyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



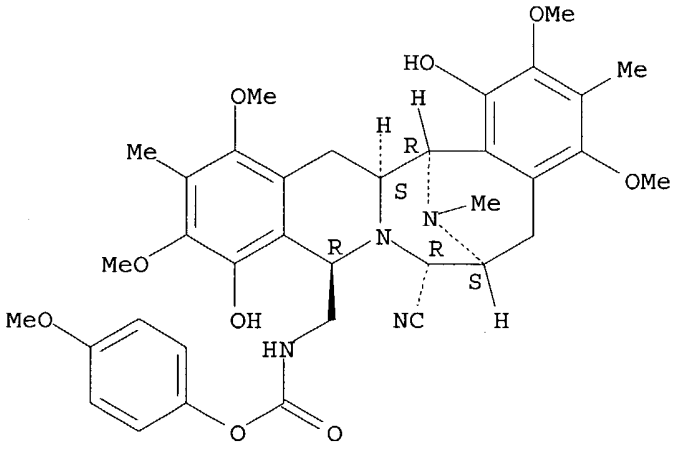
RN 349103-52-2 CAPLUS
CN Carbamic acid, [[(6S,7R,9R,14aS,15R)-7-cyano-6,7,9,14,14a,15-hexahydro-1,10-dihydroxy-2,4,11,13-tetramethoxy-3,12,16-trimethyl-6,15-imino-5H-isoquino[3,2-b][3]benzazocin-9-yl]methyl]-, phenylmethyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.



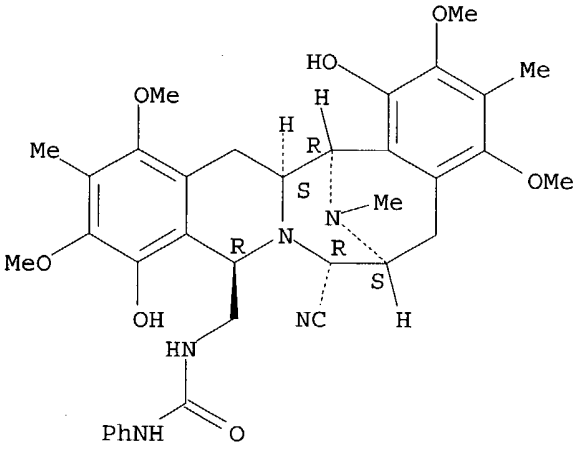
RN 349103-53-3 CAPLUS
CN Carbamic acid, [[(6S,7R,9R,14aS,15R)-7-cyano-6,7,9,14,14a,15-hexahydro-1,10-dihydroxy-2,4,11,13-tetramethoxy-3,12,16-trimethyl-6,15-imino-5H-isoquino[3,2-b][3]benzazocin-9-yl]methyl]-, 4-methoxyphenyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.



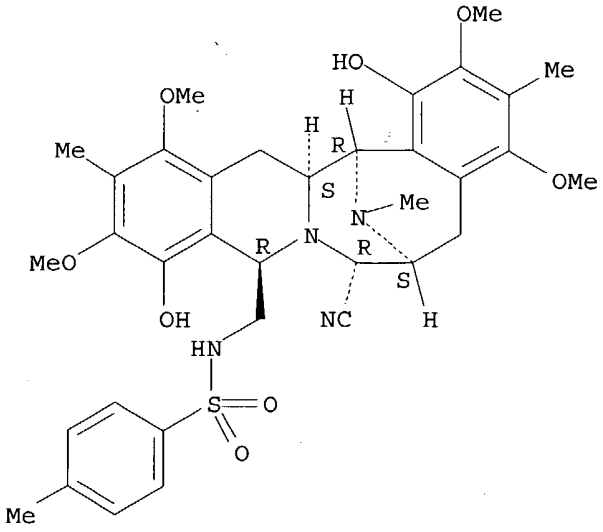
RN 349103-54-4 CAPLUS
CN Urea, N-[[(6S,7R,9R,14aS,15R)-7-cyano-6,7,9,14,14a,15-hexahydro-1,10-dihydroxy-2,4,11,13-tetramethoxy-3,12,16-trimethyl-6,15-imino-5H-isoquino[3,2-b][3]benzazocin-9-yl]methyl]-N'-phenyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



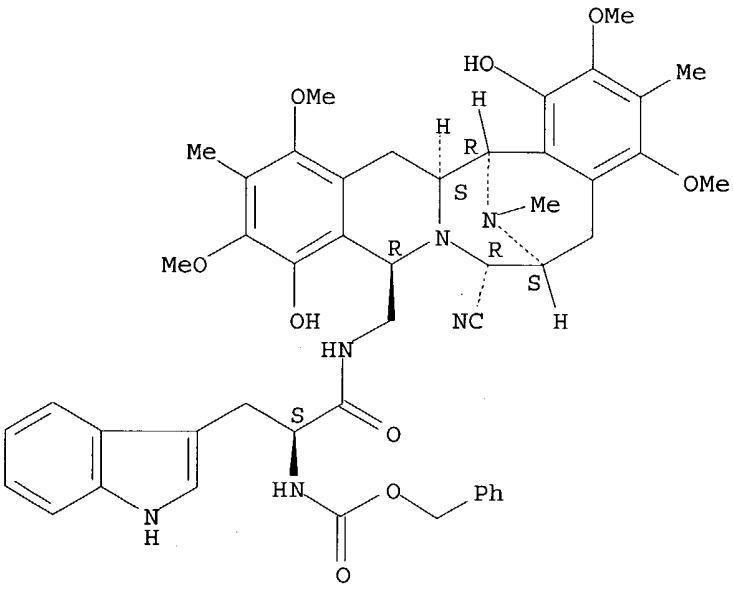
RN 349103-55-5 CAPLUS
CN Benzenesulfonamide, N-[[(6S,7R,9R,14aS,15R)-7-cyano-6,7,9,14,14a,15-hexahydro-1,10-dihydroxy-2,4,11,13-tetramethoxy-3,12,16-trimethyl-6,15-imino-5H-isoquino[3,2-b][3]benzazocin-9-yl]methyl]-4-methyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



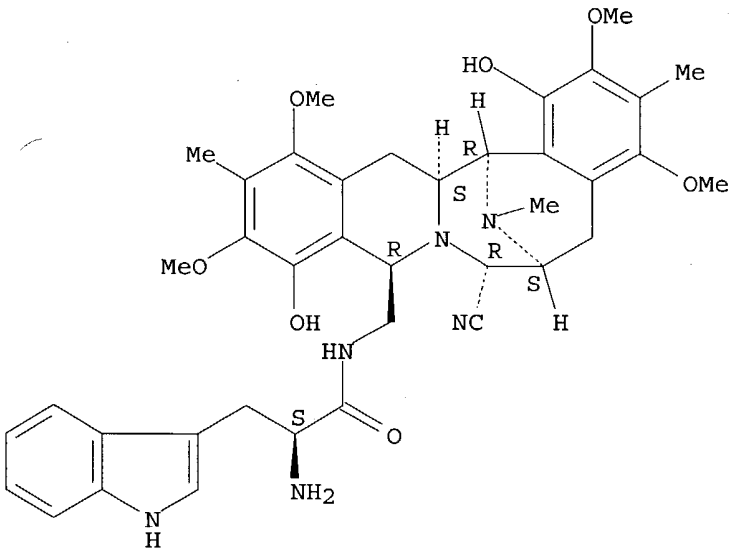
RN 349103-56-6 CAPLUS
CN Carbamic acid, [(1S)-2-[[[(6S,7R,9R,14aS,15R)-7-cyano-6,7,9,14,14a,15-hexahydro-1,10-dihydroxy-2,4,11,13-tetramethoxy-3,12,16-trimethyl-6,15-imino-5H-isoquino[3,2-b][3]benzazocin-9-yl]methyl]amino]-1-(1H-indol-3-ylmethyl)-2-oxoethyl]-, phenylmethyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.



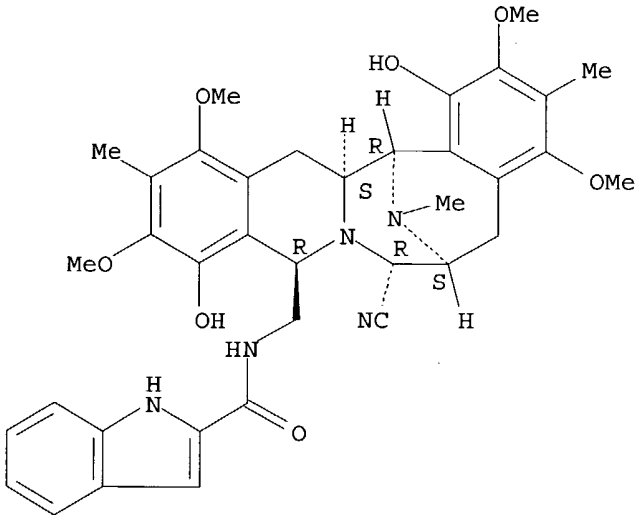
RN 349103-57-7 CAPLUS
CN 1H-Indole-3-propanamide, α-amino-N-[[(6S,7R,9R,14aS,15R)-7-cyano-6,7,9,14,14a,15-hexahydro-1,10-dihydroxy-2,4,11,13-tetramethoxy-3,12,16-trimethyl-6,15-imino-5H-isoquino[3,2-b][3]benzazocin-9-yl]methyl]-, (αS)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



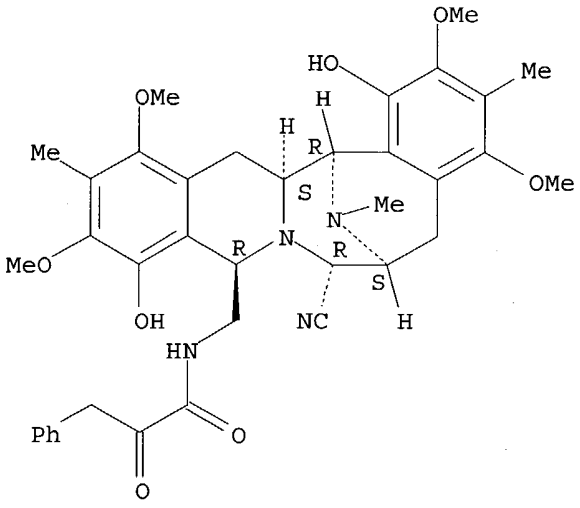
RN 349103-58-8 CAPLUS
CN 1H-Indole-2-carboxamide, N-[[(6S,7R,9R,14aS,15R)-7-cyano-6,7,9,14,14a,15-hexahydro-1,10-dihydroxy-2,4,11,13-tetramethoxy-3,12,16-trimethyl-6,15-imino-5H-isoquino[3,2-b][3]benzazocin-9-yl]methyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



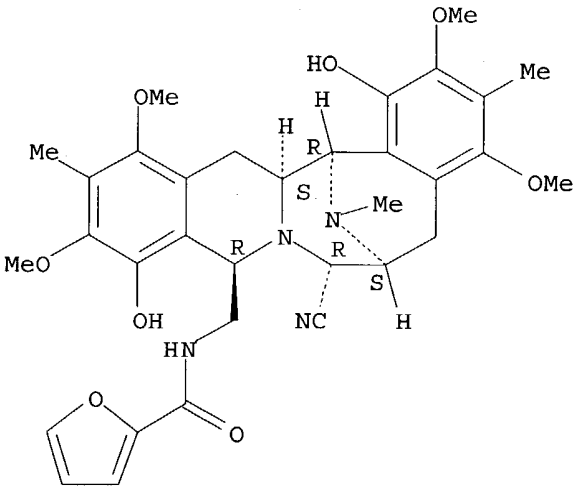
RN 349103-59-9 CAPLUS
CN Benzenepropanamide, N-[[(6S,7R,9R,14aS,15R)-7-cyano-6,7,9,14,14a,15-hexahydro-1,10-dihydroxy-2,4,11,13-tetramethoxy-3,12,16-trimethyl-6,15-imino-5H-isoquino[3,2-b][3]benzazocin-9-yl]methyl]-α-oxo- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



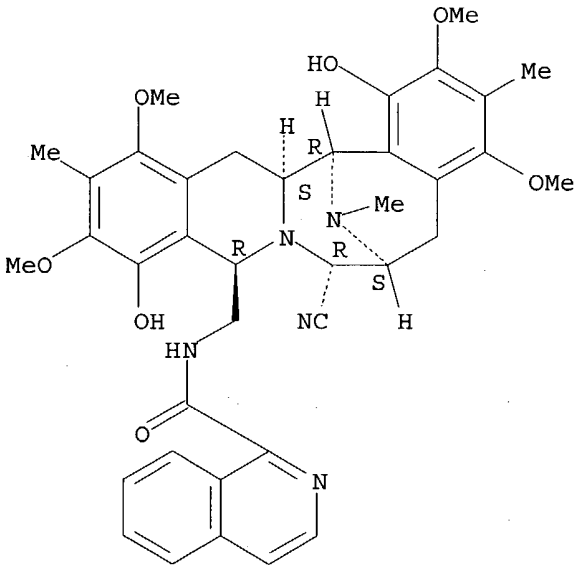
RN 349103-60-2 CAPLUS
CN 2-Furancarboxamide, N-[[(6S,7R,9R,14aS,15R)-7-cyano-6,7,9,14,14a,15-hexahydro-1,10-dihydroxy-2,4,11,13-tetramethoxy-3,12,16-trimethyl-6,15-imino-5H-isoquino[3,2-b][3]benzazocin-9-yl]methyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



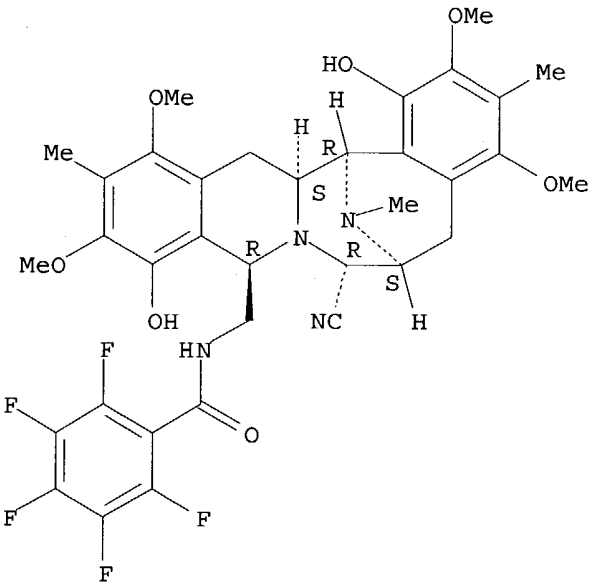
RN 349103-61-3 CAPLUS
CN 1-Isoquinolinecarboxamide, N-[[(6S,7R,9R,14aS,15R)-7-cyano-6,7,9,14,14a,15-hexahydro-1,10-dihydroxy-2,4,11,13-tetramethoxy-3,12,16-trimethyl-6,15-imino-5H-isoquino[3,2-b][3]benzazocin-9-yl]methyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



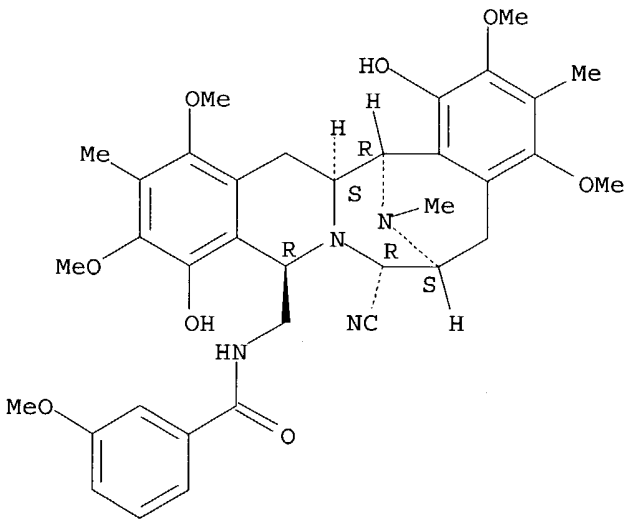
RN 349103-62-4 CAPLUS
CN Benzamide, N-[[(6S,7R,9R,14aS,15R)-7-cyano-6,7,9,14,14a,15-hexahydro-1,10-dihydroxy-2,4,11,13-tetramethoxy-3,12,16-trimethyl-6,15-imino-5H-isoquino[3,2-b][3]benzazocin-9-yl]methyl]-2,3,4,5,6-pentafluoro- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



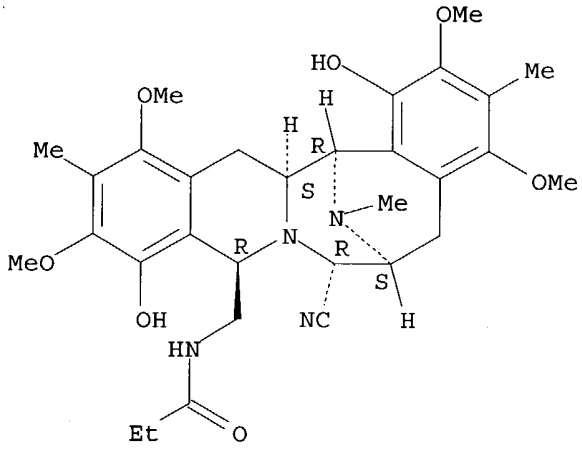
RN 349103-63-5 CAPLUS
CN Benzamide, N-[[(6S,7R,9R,14aS,15R)-7-cyano-6,7,9,14,14a,15-hexahydro-1,10-dihydroxy-2,4,11,13-tetramethoxy-3,12,16-trimethyl-6,15-imino-5H-isoquino[3,2-b][3]benzazocin-9-yl]methyl]-3-methoxy- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



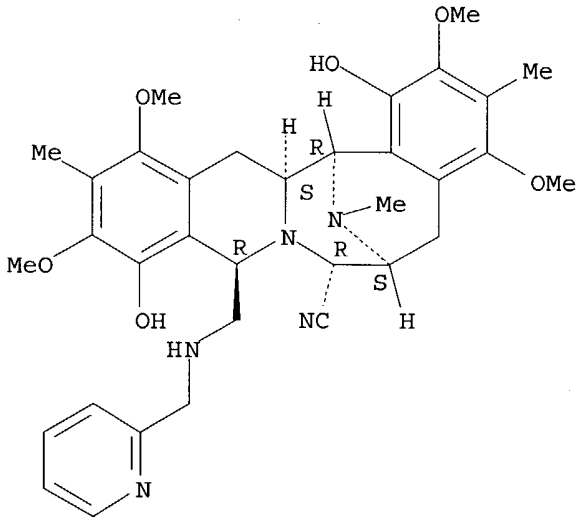
RN 349103-64-6 CAPLUS
CN Propanamide, N-[[(6S,7R,9R,14aS,15R)-7-cyano-6,7,9,14,14a,15-hexahydro-1,10-dihydroxy-2,4,11,13-tetramethoxy-3,12,16-trimethyl-6,15-imino-5H-isoquino[3,2-b][3]benzazocin-9-yl]methyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



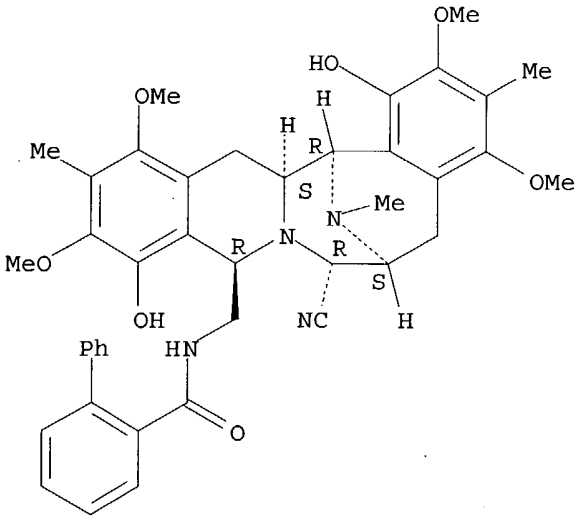
RN 349103-65-7 CAPLUS
CN 6,15-Imino-5H-isoquino[3,2-b][3]benzazocine-7-carbonitrile, 6,7,9,14,14a,15-hexahydro-1,10-dihydroxy-2,4,11,13-tetramethoxy-3,12,16-trimethyl-9-[[(2-pyridinylmethyl)amino]methyl]-, (6S,7R,9R,14aS,15R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



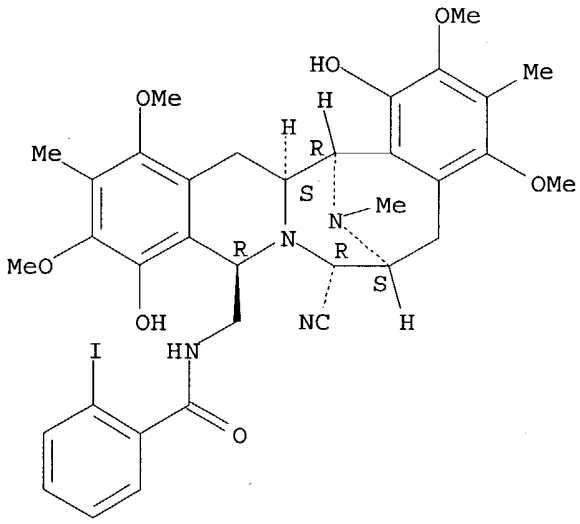
RN 349103-66-8 CAPLUS
CN [1,1'-Biphenyl]-2-carboxamide, N-[[(6S,7R,9R,14aS,15R)-7-cyano-6,7,9,14,14a,15-hexahydro-1,10-dihydroxy-2,4,11,13-tetramethoxy-3,12,16-trimethyl-6,15-imino-5H-isoquino[3,2-b][3]benzazocin-9-yl]methyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



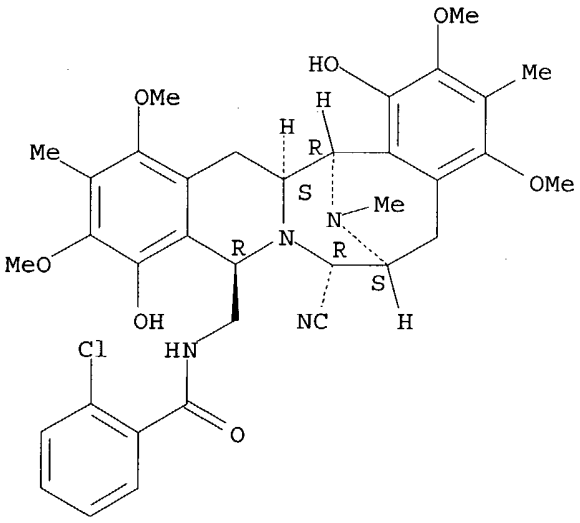
RN 349103-67-9 CAPLUS
CN Benzamide, N-[[(6S,7R,9R,14aS,15R)-7-cyano-6,7,9,14,14a,15-hexahydro-1,10-dihydroxy-2,4,11,13-tetramethoxy-3,12,16-trimethyl-6,15-imino-5H-isoquino[3,2-b][3]benzazocin-9-yl]methyl]-2-iodo- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



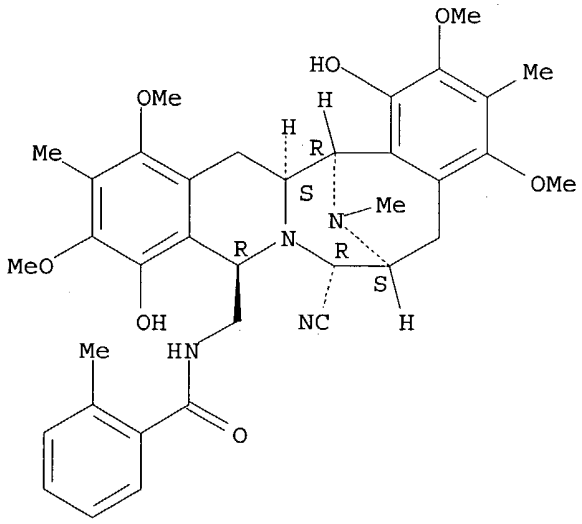
RN 349103-68-0 CAPLUS
CN Benzamide, 2-chloro-N-[[(6S,7R,9R,14aS,15R)-7-cyano-6,7,9,14,14a,15-hexahydro-1,10-dihydroxy-2,4,11,13-tetramethoxy-3,12,16-trimethyl-6,15-imino-5H-isoquino[3,2-b][3]benzazocin-9-yl]methyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



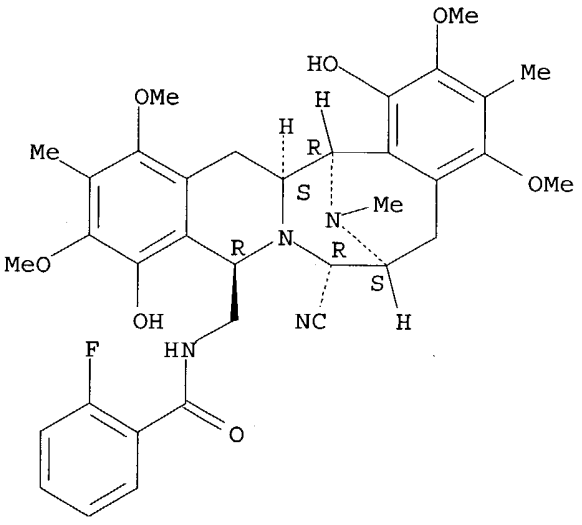
RN 349103-69-1 CAPLUS
CN Benzamide, N-[[(6S,7R,9R,14aS,15R)-7-cyano-6,7,9,14,14a,15-hexahydro-1,10-dihydroxy-2,4,11,13-tetramethoxy-3,12,16-trimethyl-6,15-imino-5H-isoquino[3,2-b][3]benzazocin-9-yl]methyl]-2-methyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



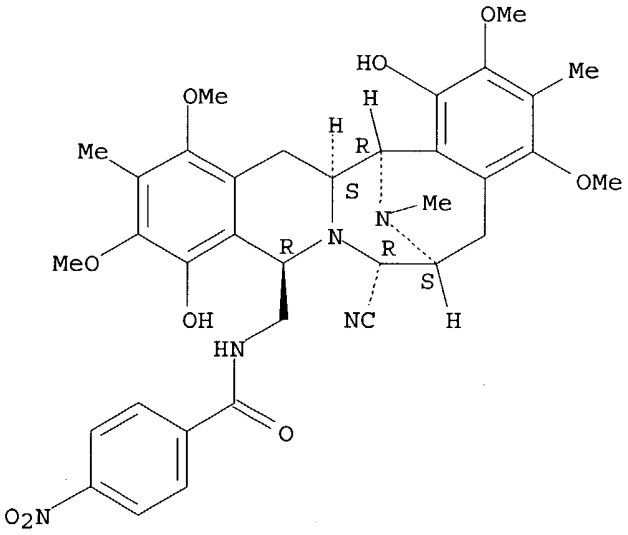
RN 349103-70-4 CAPLUS
CN Benzamide, N-[[(6S,7R,9R,14aS,15R)-7-cyano-6,7,9,14,14a,15-hexahydro-1,10-dihydroxy-2,4,11,13-tetramethoxy-3,12,16-trimethyl-6,15-imino-5H-isoquino[3,2-b][3]benzazocin-9-yl]methyl]-2-fluoro- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



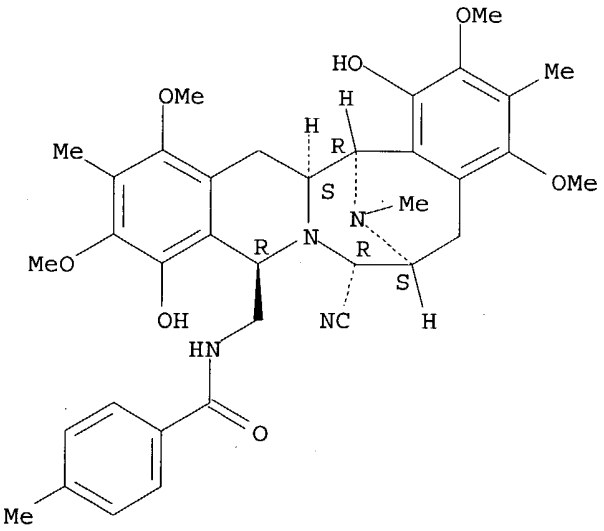
RN 349103-71-5 CAPLUS
CN Benzamide, N-[[(6S,7R,9R,14aS,15R)-7-cyano-6,7,9,14,14a,15-hexahydro-1,10-dihydroxy-2,4,11,13-tetramethoxy-3,12,16-trimethyl-6,15-imino-5H-isoquino[3,2-b][3]benzazocin-9-yl]methyl]-4-nitro- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



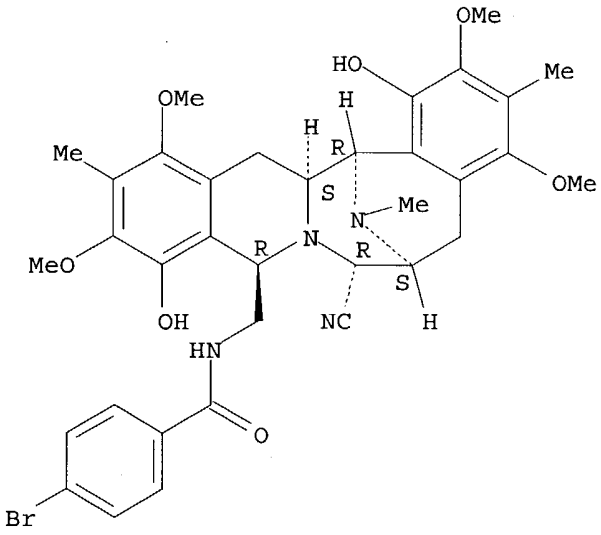
RN 349103-72-6 CAPLUS
CN Benzamide, N-[[(6S,7R,9R,14aS,15R)-7-cyano-6,7,9,14,14a,15-hexahydro-1,10-dihydroxy-2,4,11,13-tetramethoxy-3,12,16-trimethyl-6,15-imino-5H-isoquino[3,2-b][3]benzazocin-9-yl]methyl]-4-methyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



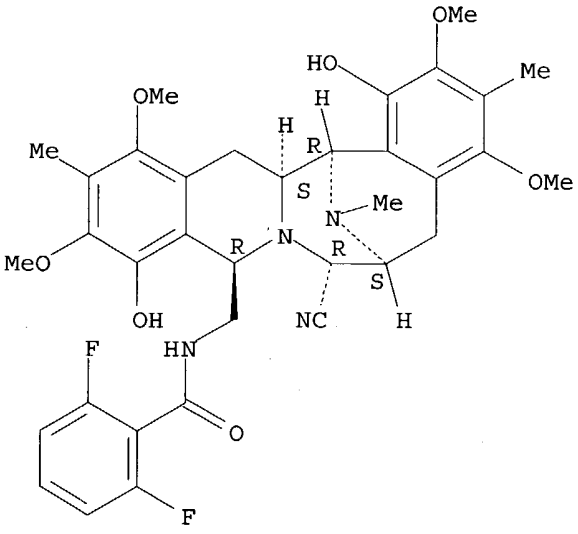
RN 349103-73-7 CAPLUS
CN Benzamide, 4-bromo-N-[[(6S,7R,9R,14aS,15R)-7-cyano-6,7,9,14,14a,15-hexahydro-1,10-dihydroxy-2,4,11,13-tetramethoxy-3,12,16-trimethyl-6,15-imino-5H-isoquino[3,2-b][3]benzazocin-9-yl]methyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



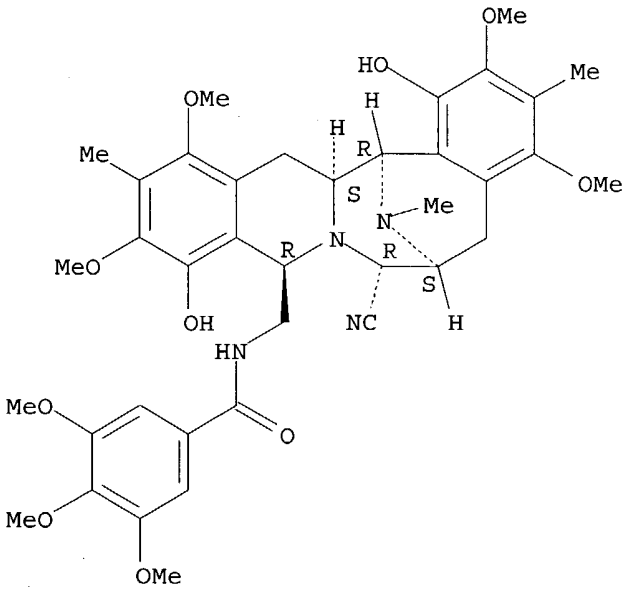
RN 349103-74-8 CAPLUS
CN Benzamide, N-[[(6S,7R,9R,14aS,15R)-7-cyano-6,7,9,14,14a,15-hexahydro-1,10-dihydroxy-2,4,11,13-tetramethoxy-3,12,16-trimethyl-6,15-imino-5H-isoquino[3,2-b][3]benzazocin-9-yl]methyl]-2,6-difluoro- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



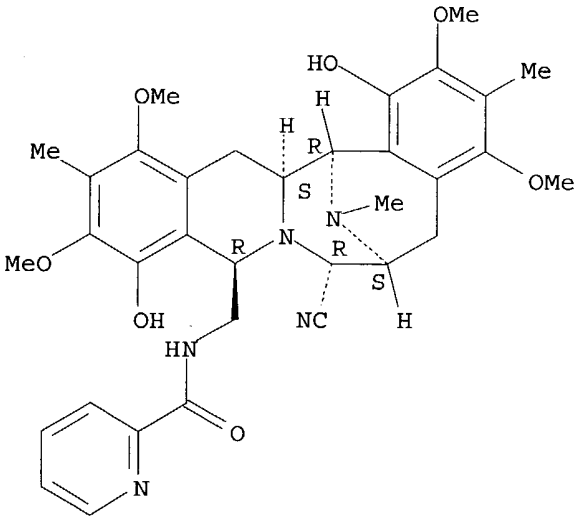
RN 349103-75-9 CAPLUS
CN Benzamide, N-[[(6S,7R,9R,14aS,15R)-7-cyano-6,7,9,14,14a,15-hexahydro-1,10-dihydroxy-2,4,11,13-tetramethoxy-3,12,16-trimethyl-6,15-imino-5H-isoquino[3,2-b][3]benzazocin-9-yl]methyl]-3,4,5-trimethoxy- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



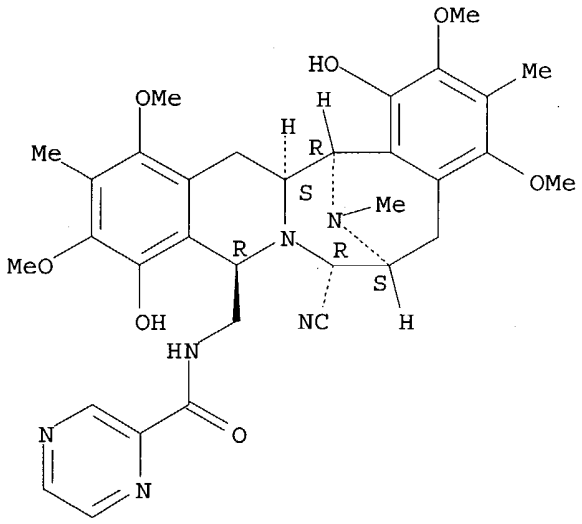
RN 349103-76-0 CAPLUS
CN 2-Pyridinecarboxamide, N-[[(6S,7R,9R,14aS,15R)-7-cyano-6,7,9,14,14a,15-hexahydro-1,10-dihydroxy-2,4,11,13-tetramethoxy-3,12,16-trimethyl-6,15-imino-5H-isoquino[3,2-b][3]benzazocin-9-yl]methyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



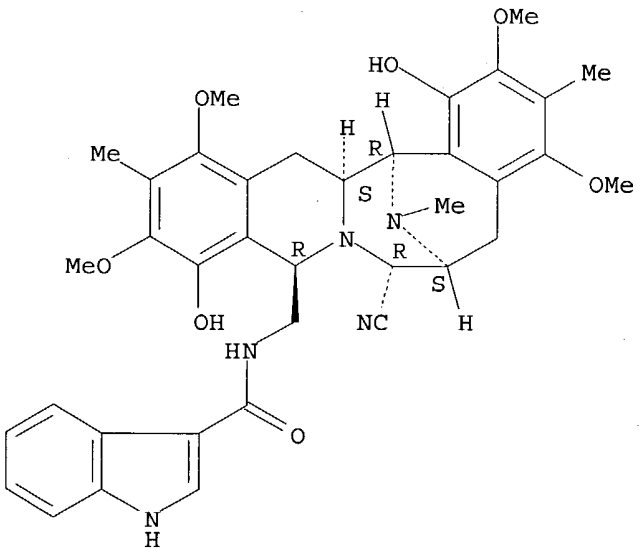
RN 349103-77-1 CAPLUS
CN Pyrazinecarboxamide, N-[[(6S,7R,9R,14aS,15R)-7-cyano-6,7,9,14,14a,15-hexahydro-1,10-dihydroxy-2,4,11,13-tetramethoxy-3,12,16-trimethyl-6,15-imino-5H-isoquino[3,2-b][3]benzazocin-9-yl]methyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



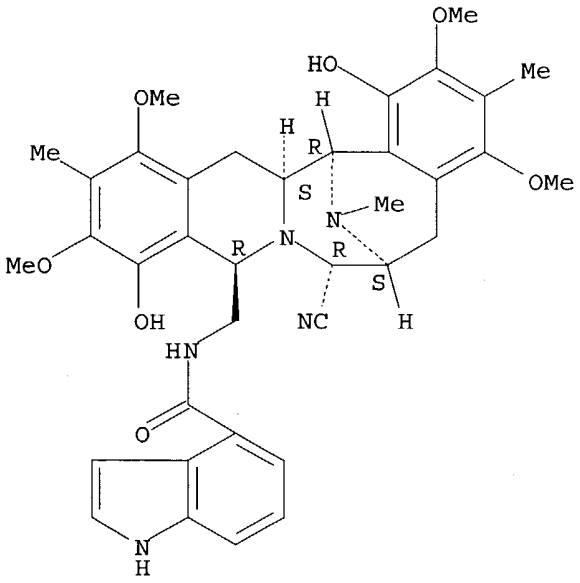
RN 349103-78-2 CAPLUS
CN 1H-Indole-3-carboxamide, N-[[(6S,7R,9R,14aS,15R)-7-cyano-6,7,9,14,14a,15-hexahydro-1,10-dihydroxy-2,4,11,13-tetramethoxy-3,12,16-trimethyl-6,15-imino-5H-isoquino[3,2-b][3]benzazocin-9-yl]methyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



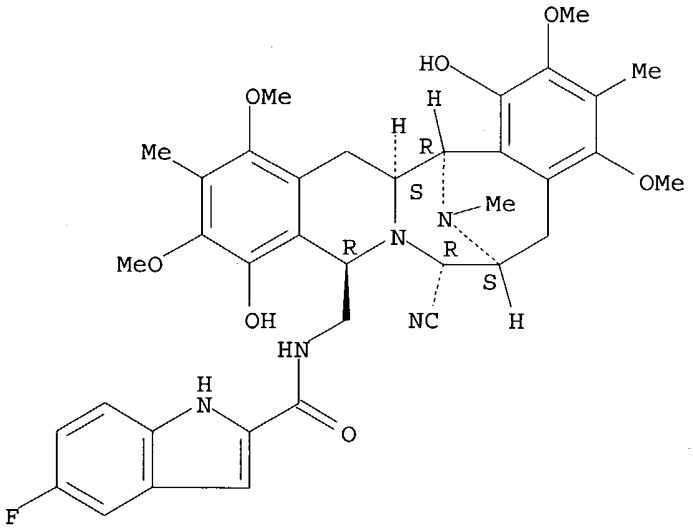
RN 349103-79-3 CAPLUS
CN 1H-Indole-4-carboxamide, N-[[(6S,7R,9R,14aS,15R)-7-cyano-6,7,9,14,14a,15-hexahydro-1,10-dihydroxy-2,4,11,13-tetramethoxy-3,12,16-trimethyl-6,15-imino-5H-isoquino[3,2-b][3]benzazocin-9-yl]methyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



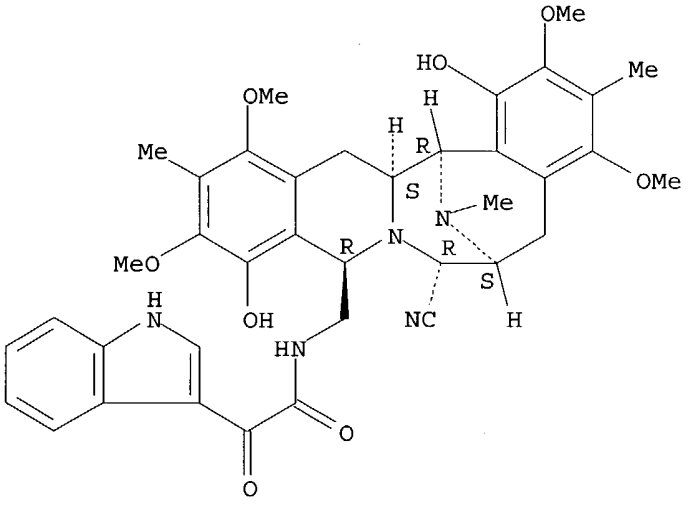
RN 349103-80-6 CAPLUS
CN 1H-Indole-2-carboxamide, N-[[(6S,7R,9R,14aS,15R)-7-cyano-6,7,9,14,14a,15-hexahydro-1,10-dihydroxy-2,4,11,13-tetramethoxy-3,12,16-trimethyl-6,15-imino-5H-isoquino[3,2-b][3]benzazocin-9-yl]methyl]-5-fluoro- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



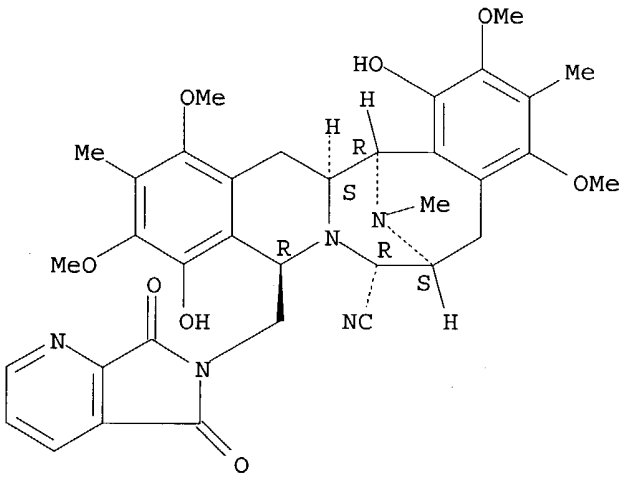
RN 349103-81-7 CAPLUS
CN 1H-Indole-3-acetamide, N-[[(6S,7R,9R,14aS,15R)-7-cyano-6,7,9,14,14a,15-hexahydro-1,10-dihydroxy-2,4,11,13-tetramethoxy-3,12,16-trimethyl-6,15-imino-5H-isoquino[3,2-b][3]benzazocin-9-yl]methyl]-α-oxo- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



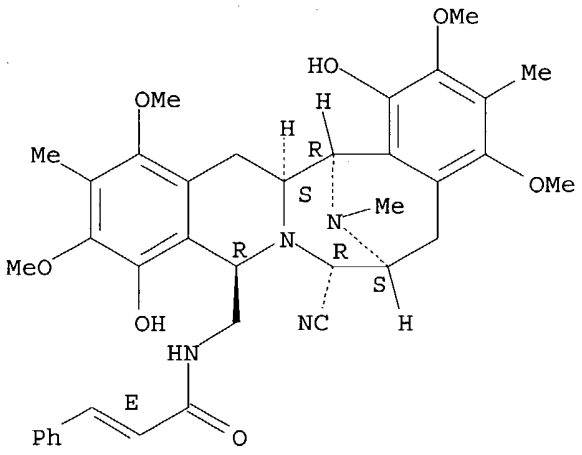
RN 349103-82-8 CAPLUS
CN 6,15-Imino-5H-isoquino[3,2-b][3]benzazocine-7-carbonitrile, 9-[(5,7-dihydro-5,7-dioxo-6H-pyrrolo[3,4-b]pyridin-6-yl)methyl]-6,7,9,14,14a,15-hexahydro-1,10-dihydroxy-2,4,11,13-tetramethoxy-3,12,16-trimethyl-, (6S,7R,9R,14aS,15R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



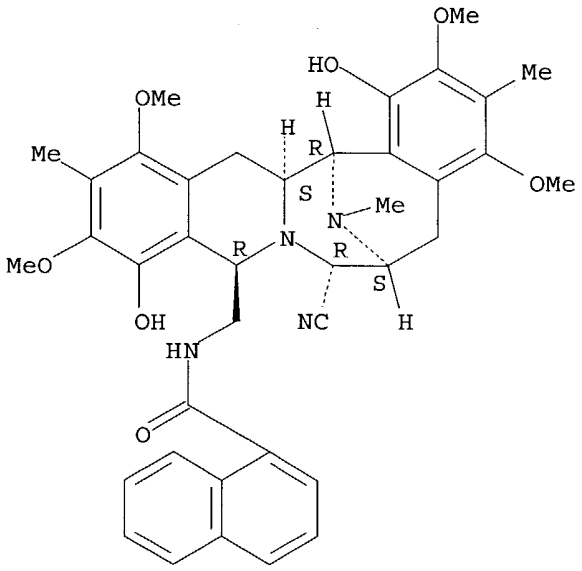
RN 349103-83-9 CAPLUS
CN 2-Propenamide, N-[[(6S,7R,9R,14aS,15R)-7-cyano-6,7,9,14,14a,15-hexahydro-1,10-dihydroxy-2,4,11,13-tetramethoxy-3,12,16-trimethyl-6,15-imino-5H-isoquino[3,2-b][3]benzazocin-9-yl]methyl]-3-phenyl-, (2E)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.
Double bond geometry as shown.



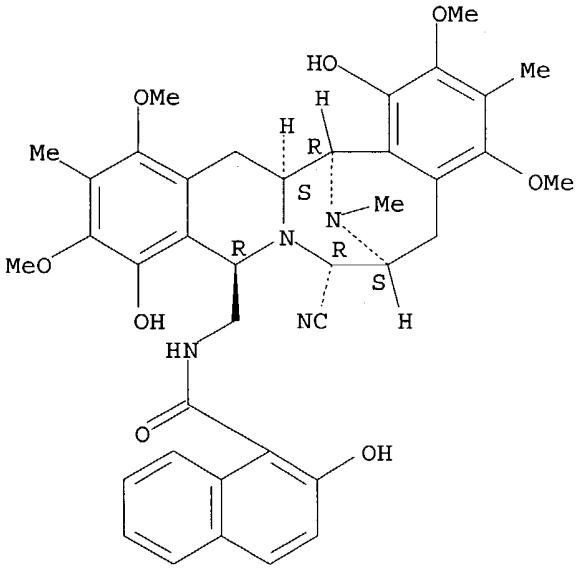
RN 349103-84-0 CAPLUS
CN 1-Naphthalenecarboxamide, N-[[(6S,7R,9R,14aS,15R)-7-cyano-6,7,9,14,14a,15-hexahydro-1,10-dihydroxy-2,4,11,13-tetramethoxy-3,12,16-trimethyl-6,15-imino-5H-isoquino[3,2-b][3]benzazocin-9-yl]methyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



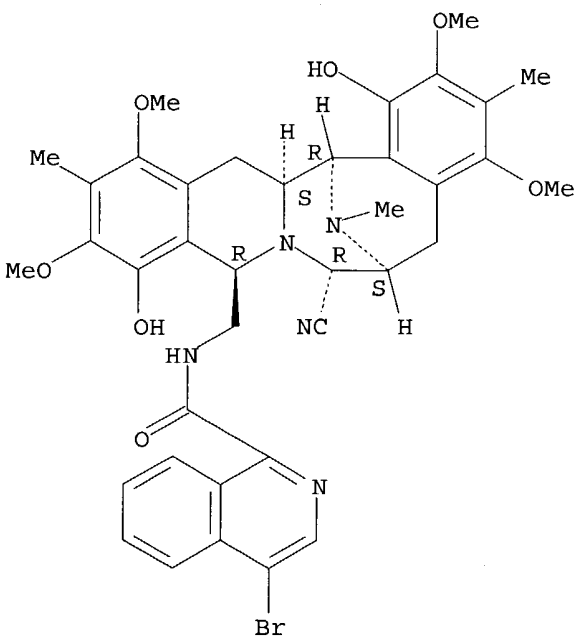
RN 349103-85-1 CAPLUS
CN 1-Naphthalenecarboxamide, N-[[(6S,7R,9R,14aS,15R)-7-cyano-6,7,9,14,14a,15-hexahydro-1,10-dihydroxy-2,4,11,13-tetramethoxy-3,12,16-trimethyl-6,15-imino-5H-isoquino[3,2-b][3]benzazocin-9-yl]methyl]-2-hydroxy- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



RN 349103-86-2 CAPLUS
CN 1-Isoquinolinecarboxamide, 4-bromo-N-[[(6S,7R,9R,14aS,15R)-7-cyano-6,7,9,14,14a,15-hexahydro-1,10-dihydroxy-2,4,11,13-tetramethoxy-3,12,16-trimethyl-6,15-imino-5H-isoquino[3,2-b][3]benzazocin-9-yl]methyl]- (9CI) (CA INDEX NAME)

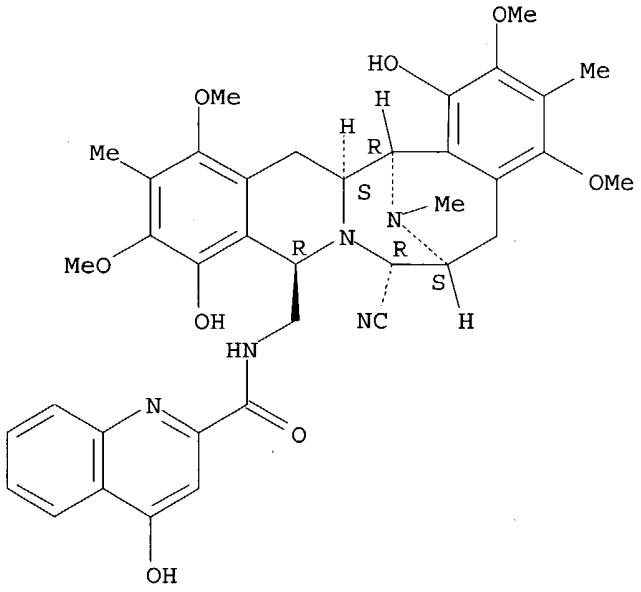
Absolute stereochemistry.



RN 349103-87-3 CAPLUS
CN 2-Quinolinecarboxamide, N-[[(6S,7R,9R,14aS,15R)-7-cyano-6,7,9,14,14a,15-

hexahydro-1,10-dihydroxy-2,4,11,13-tetramethoxy-3,12,16-trimethyl-6,15-imino-5H-isoquino[3,2-b][3]benzazocin-9-yl]methyl]-4-hydroxy- (9CI) (CA INDEX NAME)

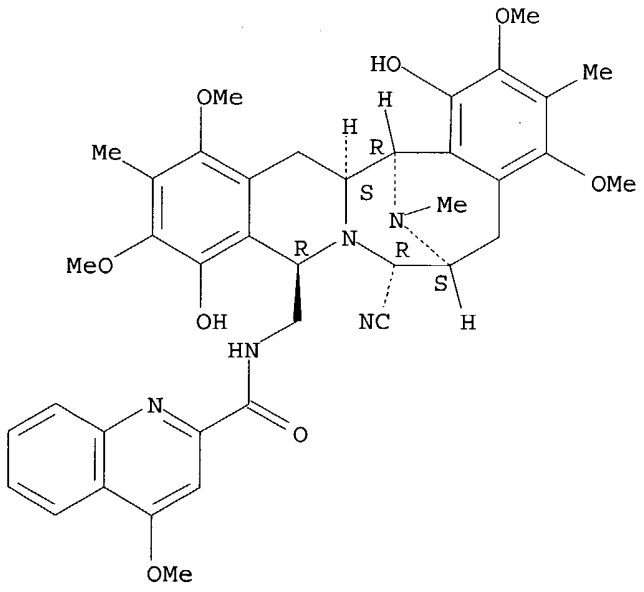
Absolute stereochemistry.



RN 349103-88-4 CAPLUS

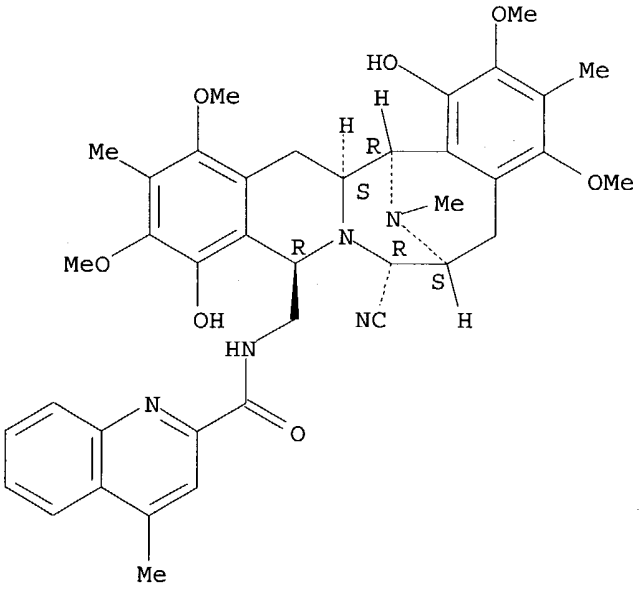
CN 2-Quinolinecarboxamide, N-[[(6S,7R,9R,14aS,15R)-7-cyano-6,7,9,14,14a,15-hexahydro-1,10-dihydroxy-2,4,11,13-tetramethoxy-3,12,16-trimethyl-6,15-imino-5H-isoquino[3,2-b][3]benzazocin-9-yl]methyl]-4-methoxy- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



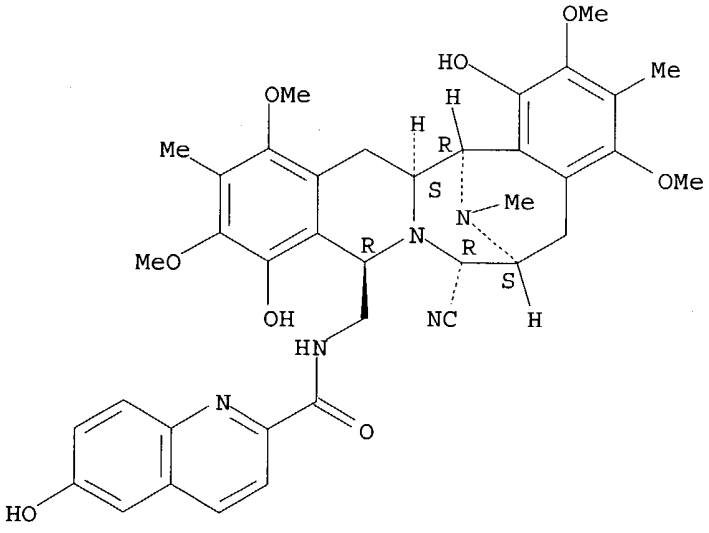
RN 349103-89-5 CAPLUS
CN 2-Quinolinecarboxamide, N-[[(6S,7R,9R,14aS,15R)-7-cyano-6,7,9,14,14a,15-hexahydro-1,10-dihydroxy-2,4,11,13-tetramethoxy-3,12,16-trimethyl-6,15-imino-5H-isoquino[3,2-b][3]benzazocin-9-yl]methyl]-4-methyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



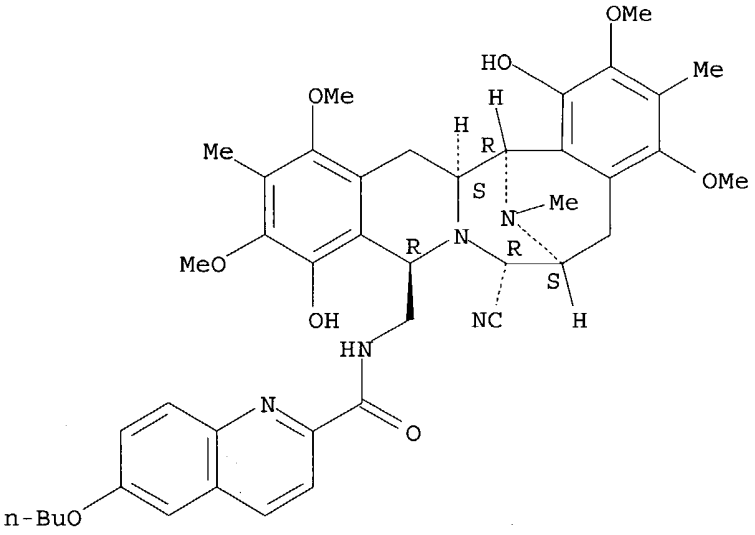
RN 349103-90-8 CAPLUS
CN 2-Quinolinecarboxamide, N-[[(6S,7R,9R,14aS,15R)-7-cyano-6,7,9,14,14a,15-hexahydro-1,10-dihydroxy-2,4,11,13-tetramethoxy-3,12,16-trimethyl-6,15-imino-5H-isoquino[3,2-b][3]benzazocin-9-yl]methyl]-6-hydroxy- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



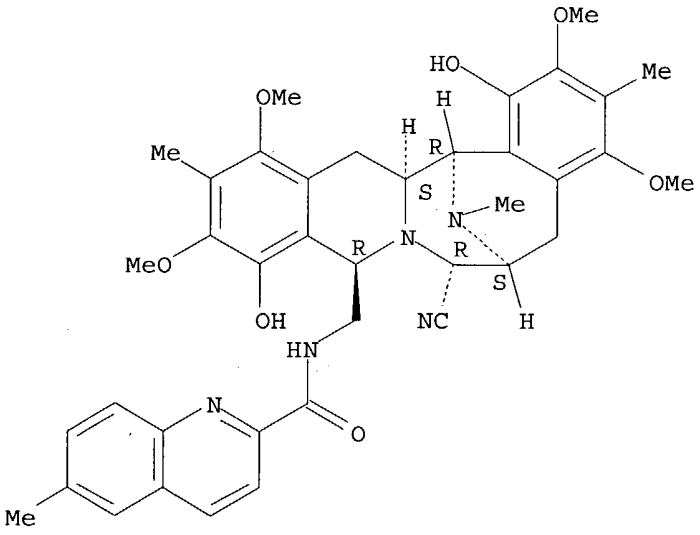
RN 349103-91-9 CAPLUS
CN 2-Quinolinecarboxamide, 6-butoxy-N-[[(6S,7R,9R,14aS,15R)-7-cyano-6,7,9,14,14a,15-hexahydro-1,10-dihydroxy-2,4,11,13-tetramethoxy-3,12,16-trimethyl-6,15-imino-5H-isoquino[3,2-b][3]benzazocin-9-yl]methyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



RN 349103-92-0 CAPLUS
CN 2-Quinolinecarboxamide, N-[[(6S,7R,9R,14aS,15R)-7-cyano-6,7,9,14,14a,15-hexahydro-1,10-dihydroxy-2,4,11,13-tetramethoxy-3,12,16-trimethyl-6,15-imino-5H-isoquino[3,2-b][3]benzazocin-9-yl]methyl]-6-methyl- (9CI) (CA INDEX NAME)

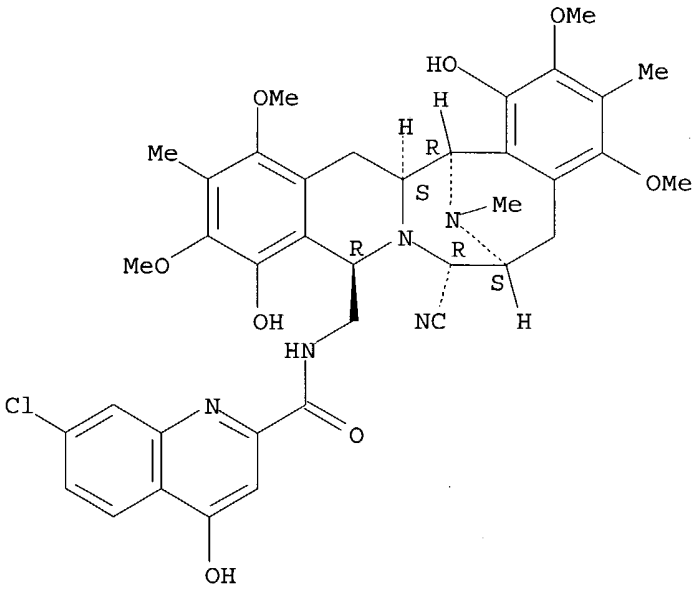
Absolute stereochemistry.



RN 349103-93-1 CAPLUS
CN 2-Quinolinecarboxamide, 7-chloro-N-[[(6S,7R,9R,14aS,15R)-7-cyano-

6,7,9,14,14a,15-hexahydro-1,10-dihydroxy-2,4,11,13-tetramethoxy-3,12,16-trimethyl-6,15-imino-5H-isoquino[3,2-b][3]benzazocin-9-yl]methyl]-4-hydroxy- (9CI) (CA INDEX NAME)

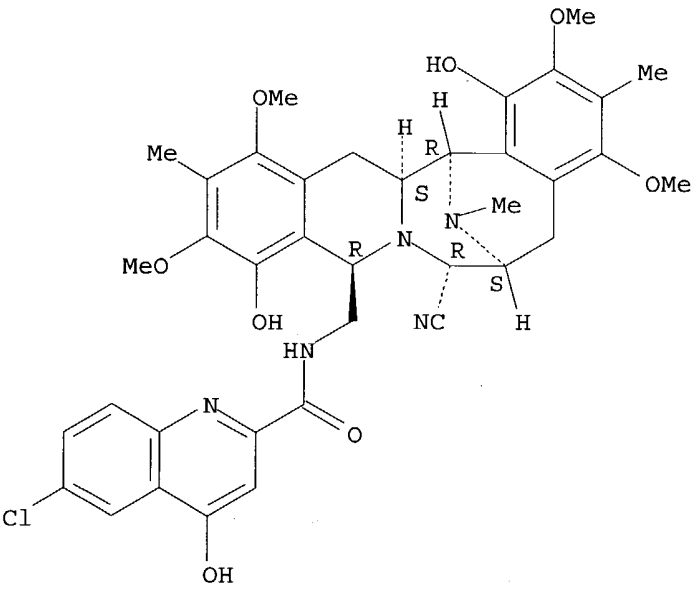
Absolute stereochemistry.



RN 349103-94-2 CAPLUS

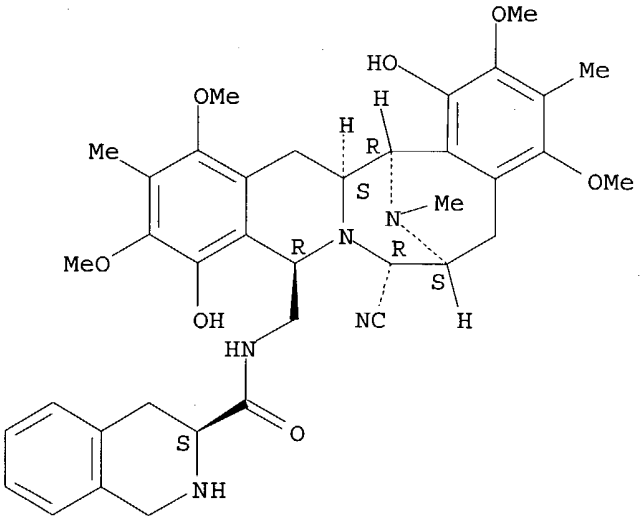
CN 2-Quinolinecarboxamide, 6-chloro-N-[[(6S,7R,9R,14aS,15R)-7-cyano-6,7,9,14,14a,15-hexahydro-1,10-dihydroxy-2,4,11,13-tetramethoxy-3,12,16-trimethyl-6,15-imino-5H-isoquino[3,2-b][3]benzazocin-9-yl]methyl]-4-hydroxy- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



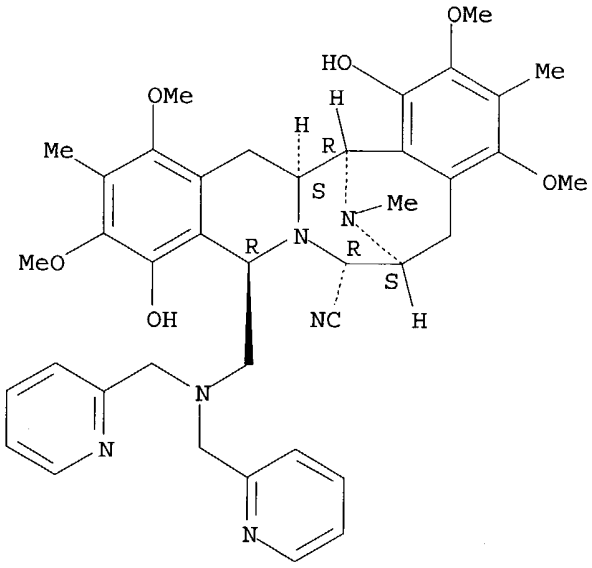
RN 349103-95-3 CAPLUS
CN 3-Isoquinolinecarboxamide, N-[[(6S,7R,9R,14aS,15R)-7-cyano-6,7,9,14,14a,15-hexahydro-1,10-dihydroxy-2,4,11,13-tetramethoxy-3,12,16-trimethyl-6,15-imino-5H-isoquino[3,2-b][3]benzazocin-9-yl]methyl]-1,2,3,4-tetrahydro-, (3S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



RN 429687-28-5 CAPLUS
CN 6,15-Imino-5H-isoquino[3,2-b][3]benzazocine-7-carbonitrile, 9-[[bis(2-pyridinylmethyl)amino]methyl]-6,7,9,14,14a,15-hexahydro-1,10-dihydroxy-2,4,11,13-tetramethoxy-3,12,16-trimethyl-, (6S,7R,9R,14aS,15R)-(9CI) (CA INDEX NAME)

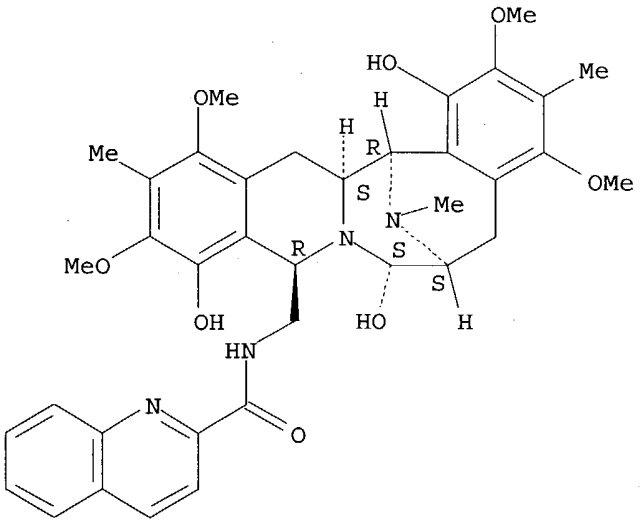
Absolute stereochemistry.



RN 429687-29-6 CAPLUS

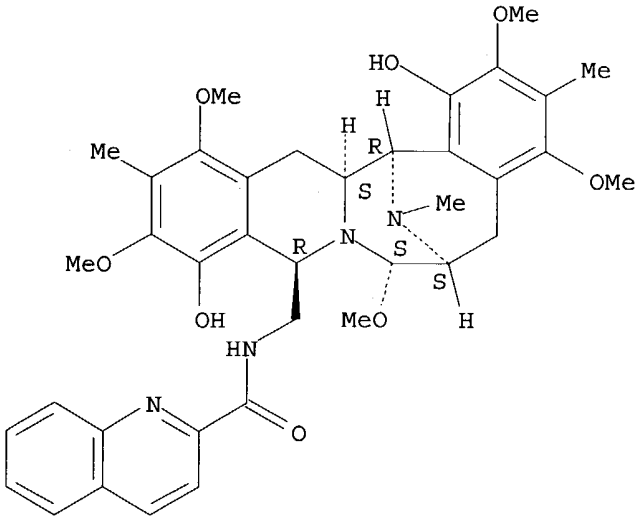
CN 2-Quinolinecarboxamide, N-[[(6S,7S,9R,14aS,15R)-6,7,9,14,14a,15-hexahydro-1,7,10-trihydroxy-2,4,11,13-tetramethoxy-3,12,16-trimethyl-6,15-imino-5H-isoquino[3,2-b][3]benzazocin-9-yl]methyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



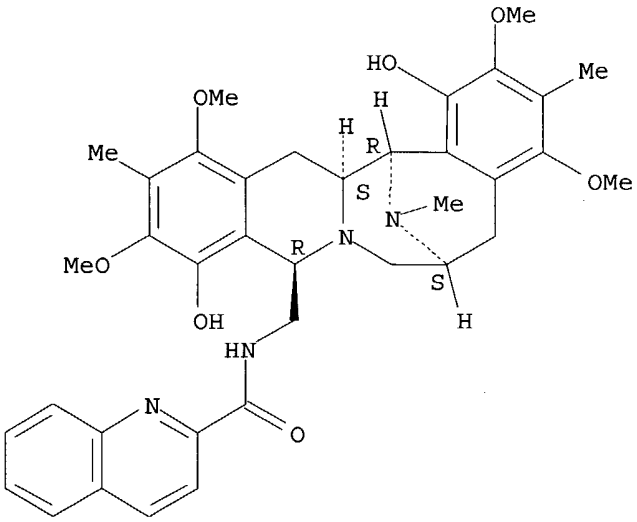
RN 429687-30-9 CAPLUS
CN 2-Quinolinecarboxamide, N-[[(6S,7S,9R,14aS,15R)-6,7,9,14,14a,15-hexahydro-1,10-dihydroxy-2,4,7,11,13-pentamethoxy-3,12,16-trimethyl-6,15-imino-5H-isoquino[3,2-b][3]benzazocin-9-yl]methyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



RN 429687-31-0 CAPLUS
CN 2-Quinolinecarboxamide, N-[[(6S,9R,14aS,15R)-6,7,9,14,14a,15-hexahydro-1,10-dihydroxy-2,4,11,13-tetramethoxy-3,12,16-trimethyl-6,15-imino-5H-isoquino[3,2-b][3]benzazocin-9-yl]methyl]- (9CI) (CA INDEX NAME)

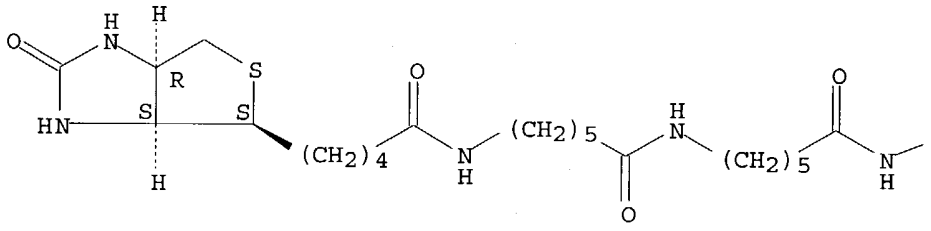
Absolute stereochemistry.



RN 429687-33-2 CAPLUS
CN 2-Quinolinecarboxamide, N-[[(6S,7R,9R,14aS,15R)-7-cyano-6,7,9,14,14a,15-hexahydro-1,10-dihydroxy-2,4,11,13-tetramethoxy-3,12,16-trimethyl-6,15-imino-5H-isoquino[3,2-b][3]benzazocin-9-yl]methyl]-6-[4-[[6-[[6-[[5-[(3aS,4S,6aR)-hexahydro-2-oxo-1H-thieno[3,4-d]imidazol-4-yl]-1-oxopentyl]amino]-1-oxohexyl]amino]-1-oxohexyl]amino]butoxy]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A



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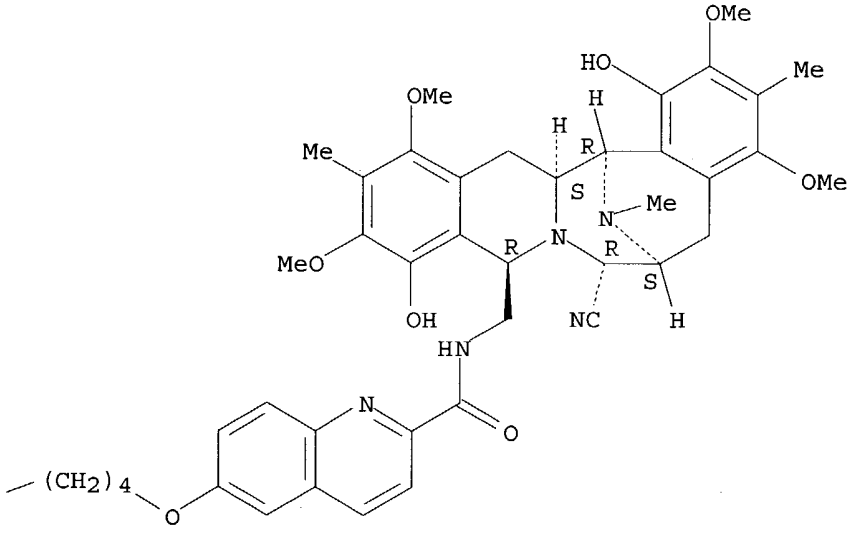
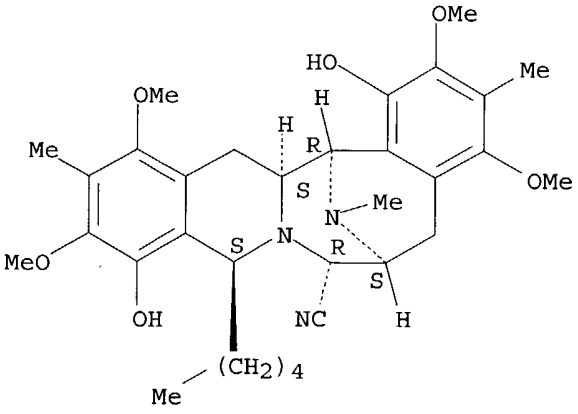


RN 429687-34-3 CAPLUS
CN 6,15-Imino-5H-isoquino[3,2-b][3]benzazocine-7-carbonitrile, 6,7,9,14,14a,15-hexahydro-1,10-dihydroxy-2,4,11,13-tetramethoxy-3,12,16-trimethyl-9-pentyl-, (6S,7R,9S,14aS,15R)- (9CI) (CA INDEX NAME)

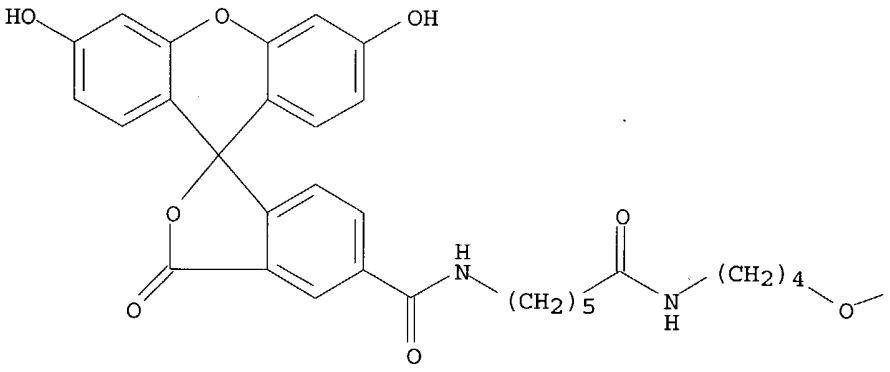
Absolute stereochemistry.



RN 429687-35-4 CAPLUS
CN 2-Quinolinecarboxamide, N-[[(6S,7R,9R,14aS,15R)-7-cyano-6,7,9,14,14a,15-hexahydro-1,10-dihydroxy-2,4,11,13-tetramethoxy-3,12,16-trimethyl-6,15-imino-5H-isoquino[3,2-b][3]benzazocin-9-yl]methyl]-6-[4-[[6-[[(3',6'-dihydroxy-3-oxospiro[isobenzofuran-1(3H),9'-[9H]xanthen]-5-yl)carbonyl]amino]-1-oxohexyl]amino]butoxy]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A



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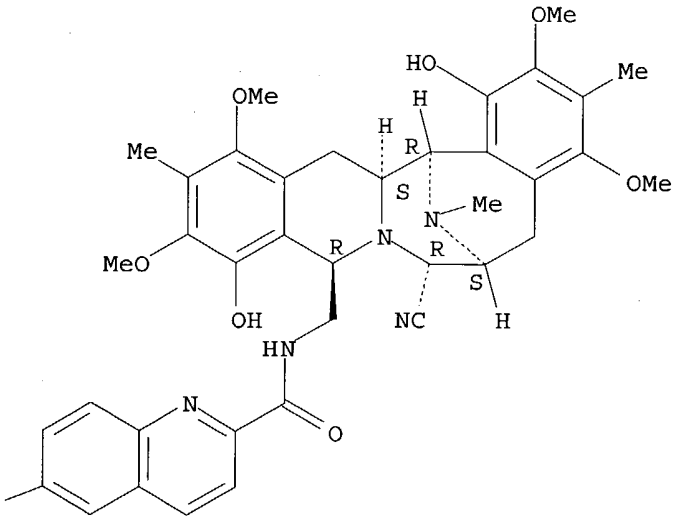
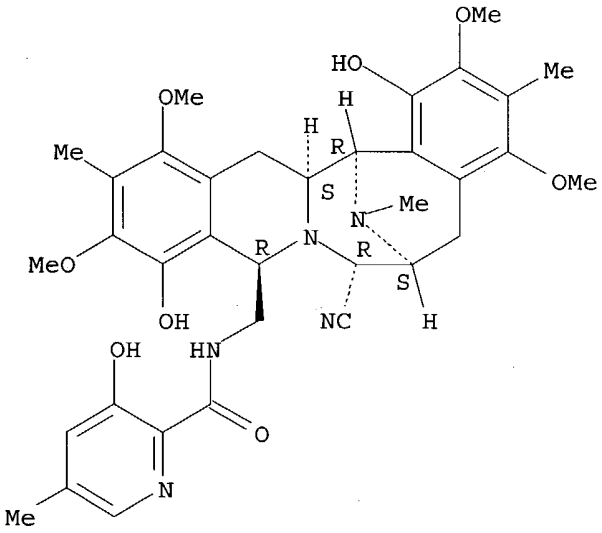


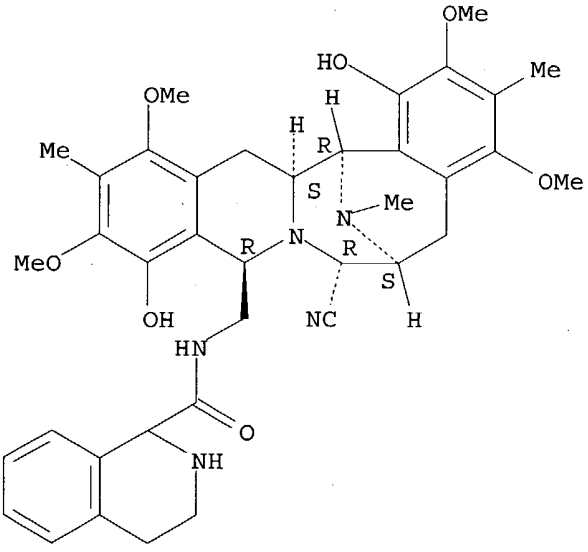
RN 429687-36-5 CAPLUS
CN 2-Pyridinecarboxamide, N-[[(6S,7R,9R,14aS,15R)-7-cyano-6,7,9,14,14a,15-hexahydro-1,10-dihydroxy-2,4,11,13-tetramethoxy-3,12,16-trimethyl-6,15-imino-5H-isoquino[3,2-b][3]benzazocin-9-yl]methyl]-3-hydroxy-5-methyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



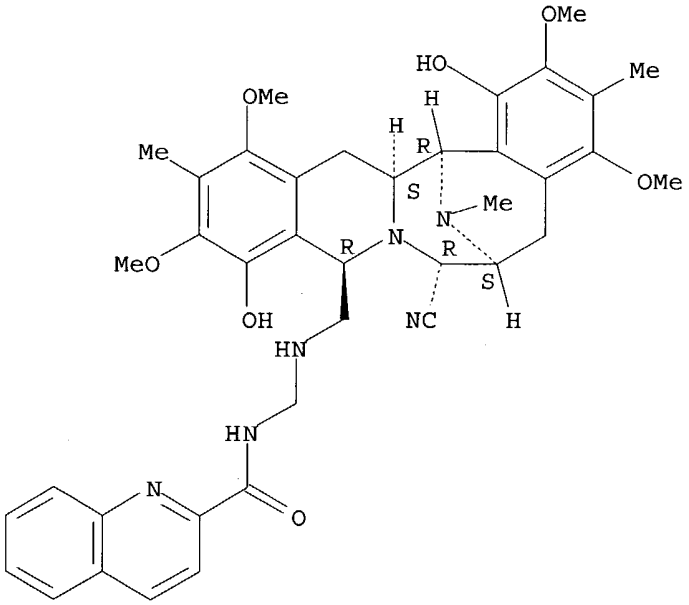
RN 429687-37-6 CAPLUS
CN 1-Isoquinolinecarboxamide, N-[[(6S,7R,9R,14aS,15R)-7-cyano-6,7,9,14,14a,15-hexahydro-1,10-dihydroxy-2,4,11,13-tetramethoxy-3,12,16-trimethyl-6,15-imino-5H-isoquino[3,2-b][3]benzazocin-9-yl]methyl]-1,2,3,4-tetrahydro- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



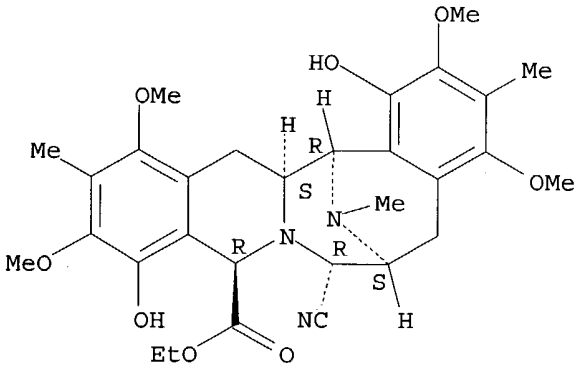
RN 429687-38-7 CAPLUS
CN 2-Quinolinecarboxamide, N-[[[[(6S,7R,9R,14aS,15R)-7-cyano-6,7,9,14,14a,15-hexahydro-1,10-dihydroxy-2,4,11,13-tetramethoxy-3,12,16-trimethyl-6,15-imino-5H-isoquino[3,2-b][3]benzazocin-9-yl]methyl]amino]methyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



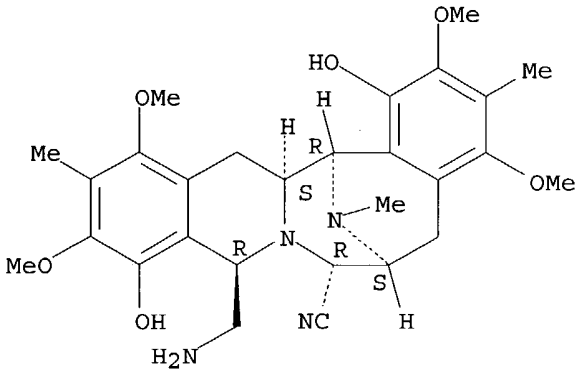
RN 429687-39-8 CAPLUS
CN 6,15-Imino-5H-isoquino[3,2-b][3]benzazocine-9-carboxylic acid, 7-cyano-6,7,9,14,14a,15-hexahydro-1,10-dihydroxy-2,4,11,13-tetramethoxy-3,12,16-trimethyl-, ethyl ester, (6S,7R,9R,14aS,15R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



IT **349103-35-1P 429687-78-5P**
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(preparation of saframycin analogs for pharmaceutical use in the treatment of cancer)
RN 349103-35-1 CAPLUS
CN 6,15-Imino-5H-isoquino[3,2-b][3]benzazocine-7-carbonitrile, 9-(aminomethyl)-6,7,9,14,14a,15-hexahydro-1,10-dihydroxy-2,4,11,13-tetramethoxy-3,12,16-trimethyl-, (6S,7R,9R,14aS,15R)- (9CI) (CA INDEX NAME)

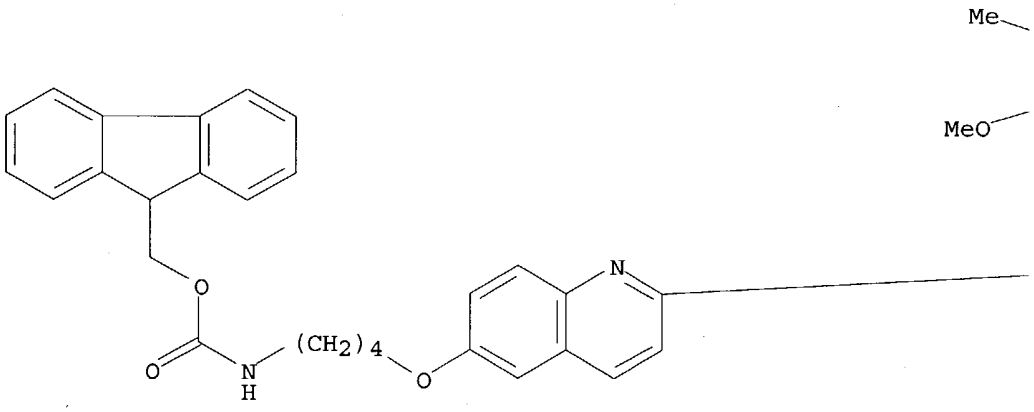
Absolute stereochemistry.



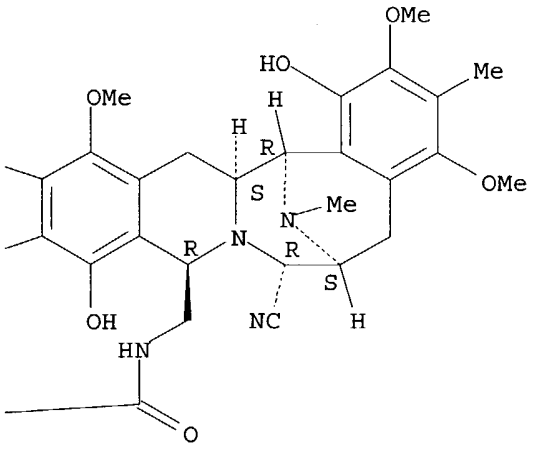
RN 429687-78-5 CAPLUS
CN Carbamic acid, [4-[[2-[[[[(6S,7R,9R,14aS,15R)-7-cyano-6,7,9,14,14a,15-hexahydro-1,10-dihydroxy-2,4,11,13-tetramethoxy-3,12,16-trimethyl-6,15-imino-5H-isoquino[3,2-b][3]benzazocin-9-yl]methyl]amino]carbonyl]-6-quinolinyl]oxy]butyl]-, 9H-fluoren-9-ylmethyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A



PAGE 1-B

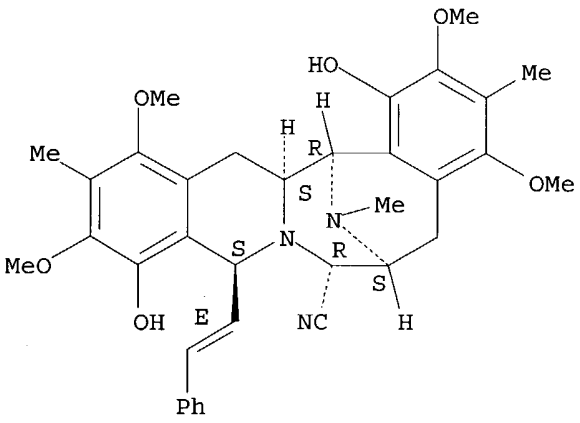


IT **429687-40-1P**
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation of saframycin analogs for pharmaceutical use in the treatment of cancer)

RN 429687-40-1 CAPLUS

CN 6,15-Imino-5H-isoquino[3,2-b][3]benzazocine-7-carbonitrile, 6,7,9,14,14a,15-hexahydro-1,10-dihydroxy-2,4,11,13-tetramethoxy-3,12,16-trimethyl-9-[(1E)-2-phenylethenyl]-, (6S,7R,9S,14aS,15R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.
Double bond geometry as shown.

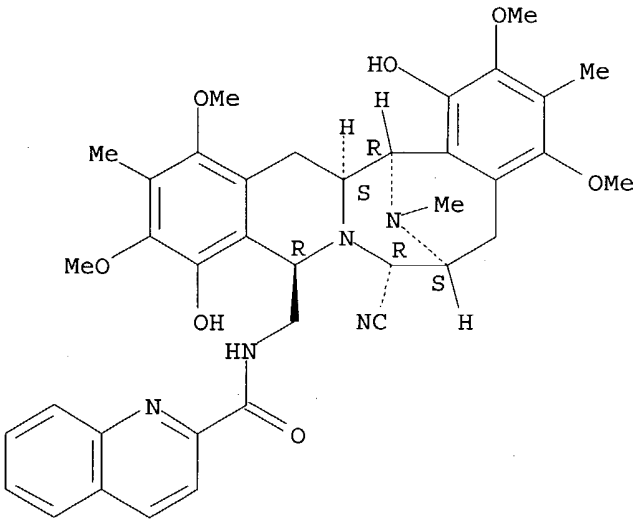


L4 ANSWER 3 OF 22 CAPLUS COPYRIGHT 2004 ACS on STN
AN 2002:381108 CAPLUS
DN 137:182177
TI Transcriptional response pathways in a yeast strain sensitive to saframycin A and a more potent analog: evidence for a common basis of activity
AU Plowright, Alleyn T.; Schaus, Scott E.; Myers, Andrew G.
CS Department of Chemistry and Chemical Biology, Harvard University, Cambridge, MA, 02138, USA
SO Chemistry & Biology (2002), 9(5), 607-618
CODEN: CBOLE2; ISSN: 1074-5521
PB Cell Press
DT Journal
LA English
GI

* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *

AB Saframycin A (I) is a natural product that inhibits human cancer cell proliferation. Its synthetic analog, QAD (II), is a more potent inhibitor of these cells. I does not affect wild-type yeast, but it does inhibit growth of the strain CCY333 (ΔPDR1/PDR3/ERG6) (IC50 = 0.9 μM). II is also a more effective inhibitor of CCY333 growth (IC50 = 0.4 μM). Transcription profiling of I- and II-treated CCY333 cultures showed that both drugs generated nearly identical profiles, with altered expression levels (≥2-fold) of >240 genes. Both agents induced the overexpression of genes involved in glycolysis, oxidative stress, and protein degradation and repressed genes encoding histones, biosynthetic enzymes, and the cellular import machinery. Significantly, neither drug affected the expression of known DNA-damage repair genes, as might have been expected if their primary mechanism of action involved the covalent modification of DNA.
IT **349103-40-8**
RL: BSU (Biological study, unclassified); BIOL (Biological study) (transcriptional response pathways in a yeast strain sensitive to saframycin A and a more potent analog: evidence for a common basis of activity)
RN 349103-40-8 CAPLUS
CN 2-Quinolinecarboxamide, N-[[(6S,7R,9R,14aS,15R)-7-cyano-6,7,9,14,14a,15-hexahydro-1,10-dihydroxy-2,4,11,13-tetramethoxy-3,12,16-trimethyl-6,15-imino-5H-isoquino[3,2-b][3]benzazocin-9-yl]methyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



RE.CNT 61 THERE ARE 61 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 4 OF 22 CAPLUS COPYRIGHT 2004 ACS on STN
AN 2001:545697 CAPLUS
DN 135:137633
TI Preparation of saframycin-ecteinascidin analogs and their therapeutic applications
IN Danishefsky, Samuel J.; Zhou, Bishan
PA The Trustees of Columbia University in the City of New York, USA
SO PCT Int. Appl., 115 pp.
CODEN: PIXXD2
APP S
DT Patent
LA English
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2001053299	A1	20010726	WO 2001-US1877	20010119
	WO 2001053299	C2	20021024		
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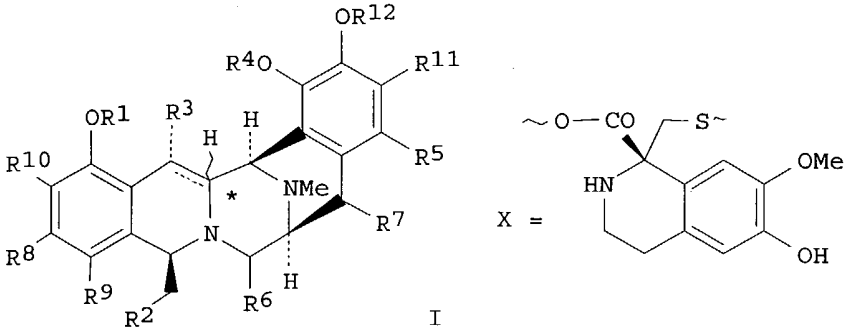
	RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
	US 2002025962	A1	20020228	US 2001-765515	20010119
	US 6686470	B2	20040203		
	EP 1254140	A1	20021106	EP 2001-903151	20010119
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR				
	JP 2003520801	T2	20030708	JP 2001-553773	20010119
PRAI	US 2000-177071P	P	20000119		
	WO 2001-US1877	W	20010119		

OS MARPAT 135:137633
GI



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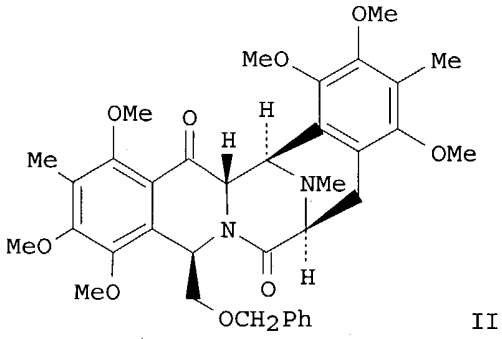


II

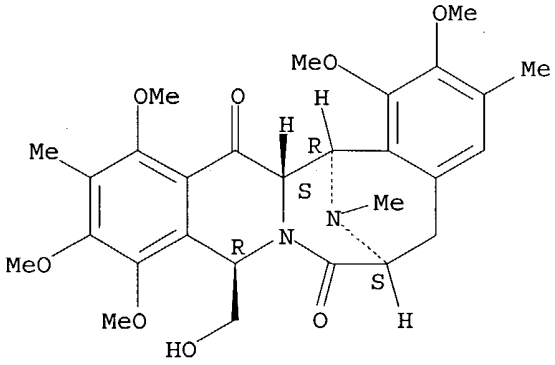
AB Compds. of the saframycin-ecteinascidin series such as I [R1,R4 = H, alkyl, acyl; R3 = =O, OH, ether, sulfide, acyl group such as OC(O)Me, OC(O)Bn and OC(O)Et; R5 = H, halogen, OH, ether, acyl, amide; R6 = =O, OH, OMe, CN, acyloxy; R7 = =O, OH, halogen, ether, acyl; R8 and R9 independently = H, Me, OMe, OEt, CF3, Br, F; R8R9 = OCH2O, five or six membered ring; R10,R11 = Me, OMe, OEt, SMe, SEt; R12 = H, alkyl, acyl; chiral center marked * has the R or the S configuration], were prepared for use as antitumor and antimicrobial agents. Thus, saframycin analog II was prepared via a multistep synthetic sequence starting from 2,4-Dimethoxy-3-methylbenzaldehyde, bromoacetal, 2-hydroxy-4-methoxy-3-methylbenzaldehyde and [[(2E)-4-bromo-2-butenyl]oxy](1,1-dimethylethyl)dimethylsilane. Ecteinascidin 743 I (R1 = Ac, R2R3 = X, R4 = R5 = R7 = H, R6 = α-OH, R8R9 = OCH2O, R10-R12 = Me) was tested for cytotoxicity and antimicrobial activity.

IT **351378-59-1P 351378-84-2P 351378-93-3P**
RL: PNU (Preparation, unclassified); PREP (Preparation)
(attempted synthesis of)

RN 351378-59-1 CAPLUS

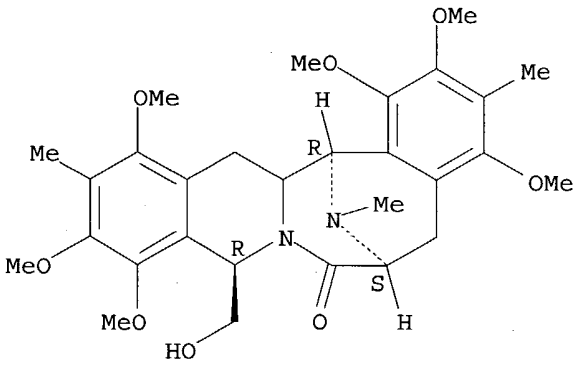
CN 6,15-Imino-5H-isoquino[3,2-b][3]benzazocine-7,14(6H,9H)-dione, 14a,15-dihydro-9-(hydroxymethyl)-1,2,10,11,13-pentamethoxy-3,12,16-trimethyl-, (6S,9R,14aS,15R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



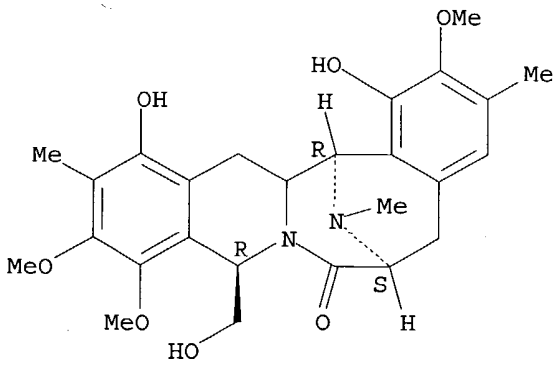
RN 351378-84-2 CAPLUS
CN 6,15-Imino-7H-isoquino[3,2-b][3]benzazocin-7-one, 5,6,9,14,14a,15-hexahydro-9-(hydroxymethyl)-1,2,4,10,11,13-hexamethoxy-3,12,16-trimethyl-, (6S,9R,15R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



RN 351378-93-3 CAPLUS
CN 6,15-Imino-7H-isoquino[3,2-b][3]benzazocin-7-one, 5,6,9,14,14a,15-hexahydro-1,13-dihydroxy-9-(hydroxymethyl)-2,10,11-trimethoxy-3,12,16-trimethyl-, (6S,9R,15R)- (9CI) (CA INDEX NAME)

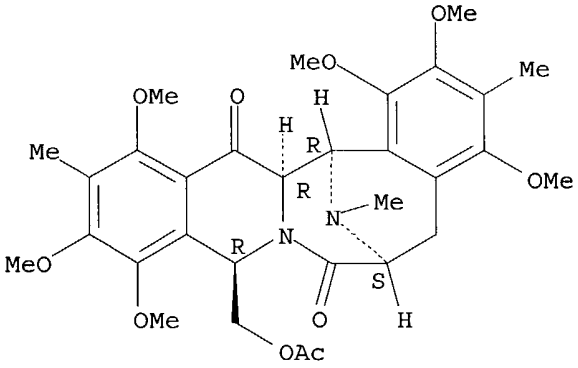
Absolute stereochemistry.



IT **351377-83-8P 351377-84-9P 351377-85-0P**
351377-86-1P 351377-88-3P 351378-45-5P
351379-85-6P 351379-86-7P 351379-88-9P
351379-89-0P
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(preparation of saframycin-ecteinascidin analogs and their therapeutic applications)

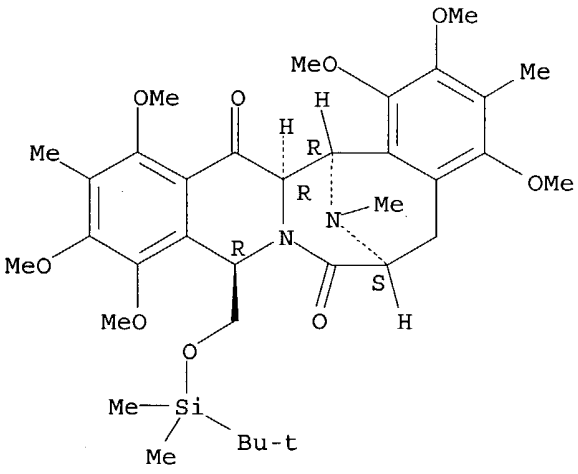
RN 351377-83-8 CAPLUS
CN 6,15-Imino-5H-isoquino[3,2-b][3]benzazocine-7,14(6H,9H)-dione, 9-[(acetyloxy)methyl]-14a,15-dihydro-1,2,4,10,11,13-hexamethoxy-3,12,16-trimethyl-, (6S,9R,14aR,15R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



RN 351377-84-9 CAPLUS
CN 6,15-Imino-5H-isoquino[3,2-b][3]benzazocine-7,14(6H,9H)-dione, 9-[[[(1,1-dimethylethyl)dimethylsilyl]oxy]methyl]-14a,15-dihydro-1,2,4,10,11,13-hexamethoxy-3,12,16-trimethyl-, (6S,9R,14aR,15R)- (9CI) (CA INDEX NAME)

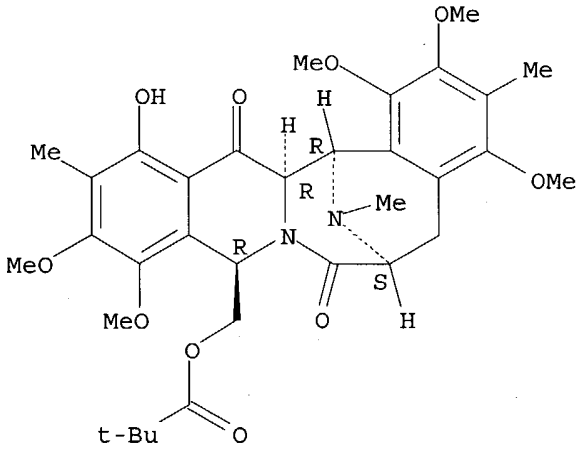
Absolute stereochemistry.



RN 351377-85-0 CAPLUS
CN Propanoic acid, 2,2-dimethyl-, [(6S,9R,14aR,15R)-6,7,9,14,14a,15-hexahydro-

13-hydroxy-1,2,4,10,11-pentamethoxy-3,12,16-trimethyl-7,14-dioxo-6,15-imino-5H-isoquino[3,2-b][3]benzazocin-9-yl]methyl ester (9CI) (CA INDEX NAME)

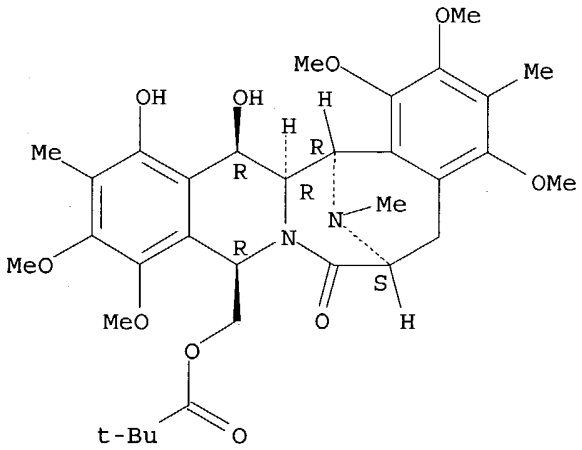
Absolute stereochemistry.



RN 351377-86-1 CAPLUS

CN Propanoic acid, 2,2-dimethyl-, [(6S,9R,14R,14aR,15R)-6,7,9,14,14a,15-hexahydro-13,14-dihydroxy-1,2,4,10,11-pentamethoxy-3,12,16-trimethyl-7-oxo-6,15-imino-5H-isoquino[3,2-b][3]benzazocin-9-yl]methyl ester (9CI) (CA INDEX NAME)

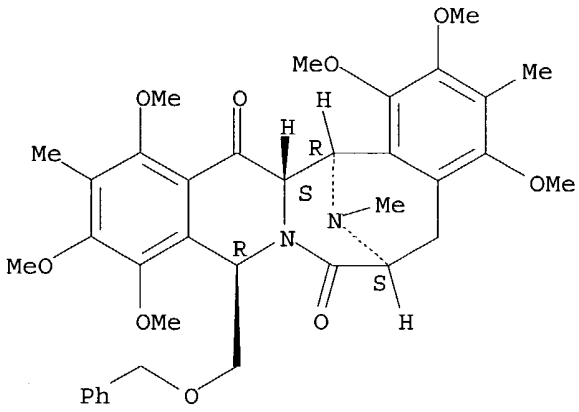
Absolute stereochemistry.



RN 351377-88-3 CAPLUS

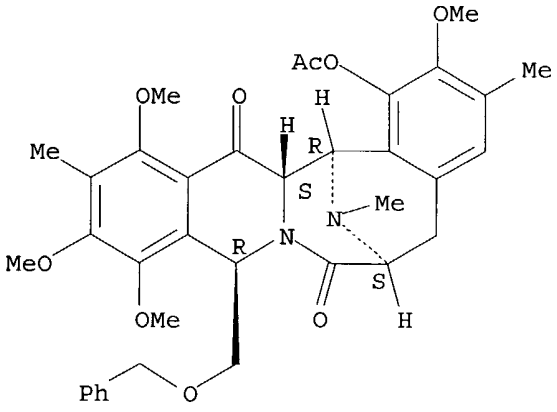
CN 6,15-Imino-5H-isoquino[3,2-b][3]benzazocine-7,14(6H,9H)-dione, 14a,15-dihydro-1,2,4,10,11,13-hexamethoxy-3,12,16-trimethyl-9-[(phenylmethoxy)methyl]-, (6S,9R,14aS,15R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



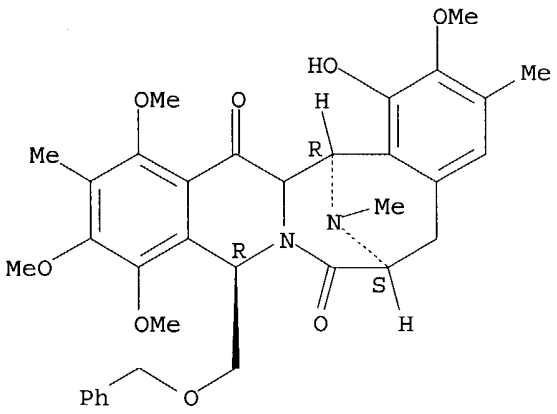
RN 351378-45-5 CAPLUS
CN 6,15-Imino-5H-isoquino[3,2-b][3]benzazocine-7,14(6H,9H)-dione, 1-(acetyloxy)-14a,15-dihydro-2,10,11,13-tetramethoxy-3,12,16-trimethyl-9-[(phenylmethoxy)methyl]-, (6S,9R,14aS,15R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



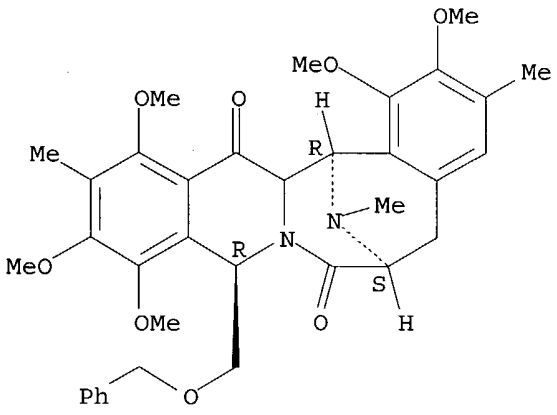
RN 351379-85-6 CAPLUS
CN 6,15-Imino-5H-isoquino[3,2-b][3]benzazocine-7,14(6H,9H)-dione, 14a,15-dihydro-1-hydroxy-2,10,11,13-tetramethoxy-3,12,16-trimethyl-9-[(phenylmethoxy)methyl]-, (6S,9R,15R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



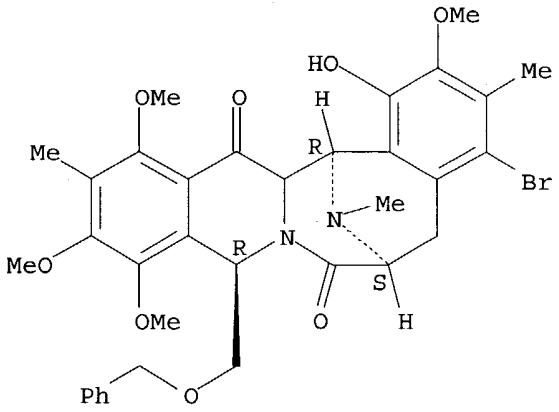
RN 351379-86-7 CAPLUS
CN 6,15-Imino-5H-isoquino[3,2-b][3]benzazocine-7,14(6H,9H)-dione, 14a,15-dihydro-1,2,10,11,13-pentamethoxy-3,12,16-trimethyl-9-[(phenylmethoxy)methyl]-, (6S,9R,15R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



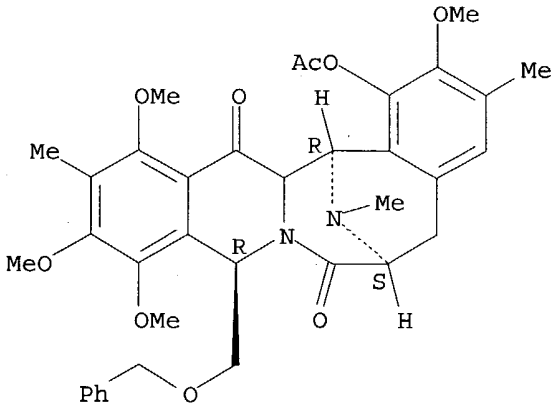
RN 351379-88-9 CAPLUS
CN 6,15-Imino-5H-isoquino[3,2-b][3]benzazocine-7,14(6H,9H)-dione, 4-bromo-14a,15-dihydro-1-hydroxy-2,10,11,13-tetramethoxy-3,12,16-trimethyl-9-[(phenylmethoxy)methyl]-, (6S,9R,15R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



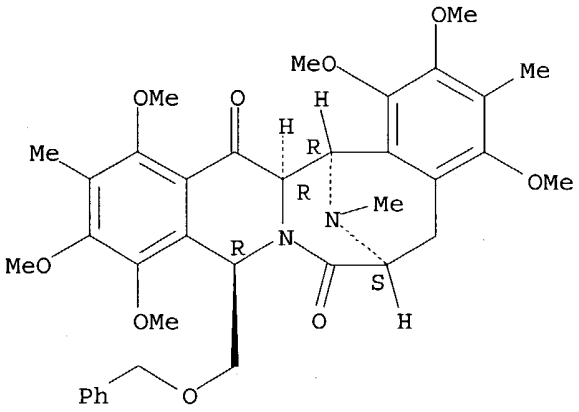
RN 351379-89-0 CAPLUS
CN 6,15-Imino-5H-isoquino[3,2-b][3]benzazocine-7,14(6H,9H)-dione, 1-(acetyloxy)-14a,15-dihydro-2,10,11,13-tetramethoxy-3,12,16-trimethyl-9-[(phenylmethoxy)methyl]-, (6S,9R,15R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



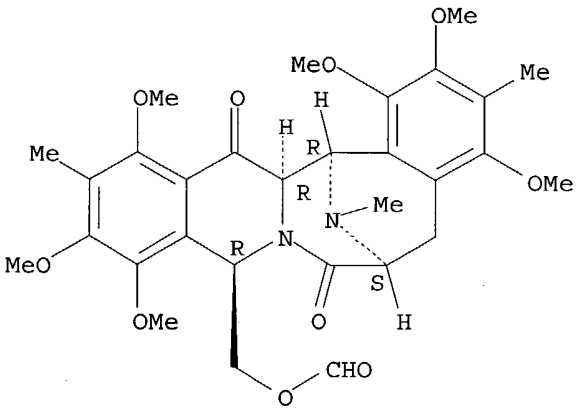
IT **271578-62-2P 273720-76-6P 351377-77-0P 351377-78-1P 351377-79-2P 351377-81-6P 351378-24-0P 351378-26-2P 351378-28-4P 351378-30-8P 351378-32-0P 351378-43-3P 351378-57-9P 351378-78-4P 351379-71-0P 351379-73-2P**
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(preparation of saframycin-ecteinascidin analogs and their therapeutic applications)
RN 271578-62-2 CAPLUS
CN 6,15-Imino-5H-isoquino[3,2-b][3]benzazocine-7,14(6H,9H)-dione, 14a,15-dihydro-1,2,4,10,11,13-hexamethoxy-3,12,16-trimethyl-9-[(phenylmethoxy)methyl]-, (6S,9R,14aR,15R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



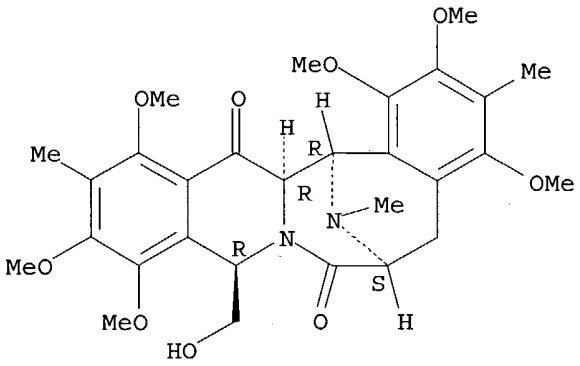
RN 273720-76-6 CAPLUS
CN 6,15-Imino-5H-isoquino[3,2-b][3]benzazocine-7,14(6H,9H)-dione, 9-[(formyloxy)methyl]-14a,15-dihydro-1,2,4,10,11,13-hexamethoxy-3,12,16-trimethyl-, (6S,9R,14aR,15R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



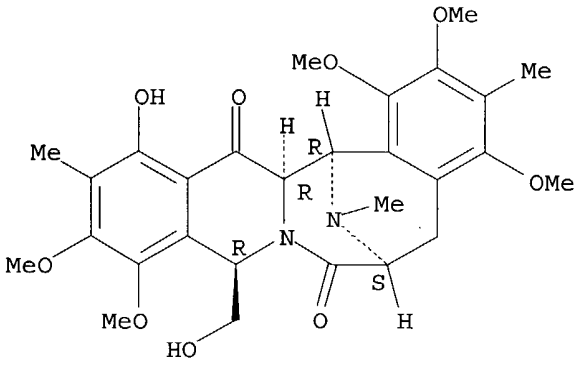
RN 351377-77-0 CAPLUS
CN 6,15-Imino-5H-isoquino[3,2-b][3]benzazocine-7,14(6H,9H)-dione, 14a,15-dihydro-9-(hydroxymethyl)-1,2,4,10,11,13-hexamethoxy-3,12,16-trimethyl-, (6S,9R,14aR,15R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



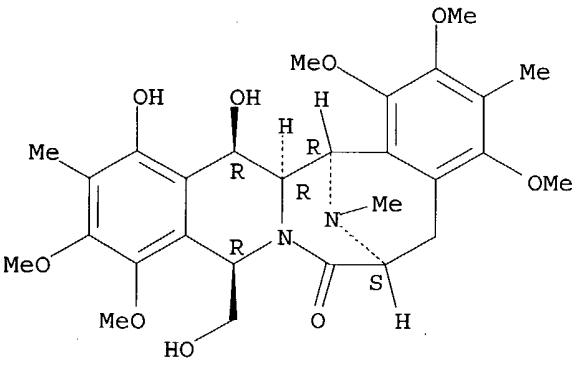
RN 351377-78-1 CAPLUS
CN 6,15-Imino-5H-isoquino[3,2-b][3]benzazocine-7,14(6H,9H)-dione, 14a,15-dihydro-13-hydroxy-9-(hydroxymethyl)-1,2,4,10,11-pentamethoxy-3,12,16-trimethyl-, (6S,9R,14aR,15R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



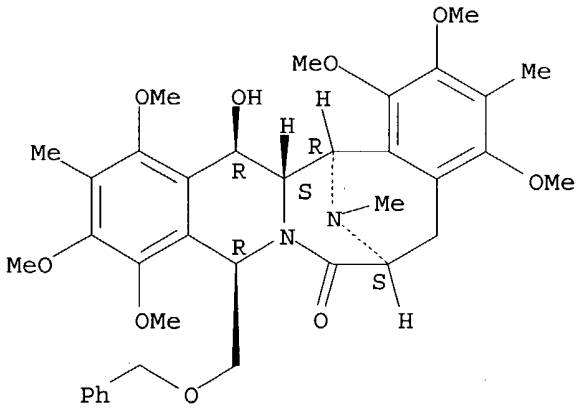
RN 351377-79-2 CAPLUS
CN 6,15-Imino-7H-isoquino[3,2-b][3]benzazocin-7-one, 5,6,9,14,14a,15-hexahydro-13,14-dihydroxy-9-(hydroxymethyl)-1,2,4,10,11-pentamethoxy-3,12,16-trimethyl-, (6S,9R,14R,14aR,15R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



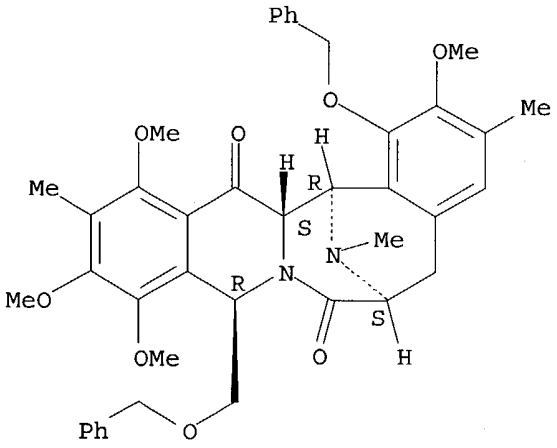
RN 351377-81-6 CAPLUS
CN 6,15-Imino-7H-isoquino[3,2-b][3]benzazocin-7-one, 5,6,9,14,14a,15-hexahydro-14-hydroxy-1,2,4,10,11,13-hexamethoxy-3,12,16-trimethyl-9-[(phenylmethoxy)methyl]-, (6S,9R,14R,14aS,15R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



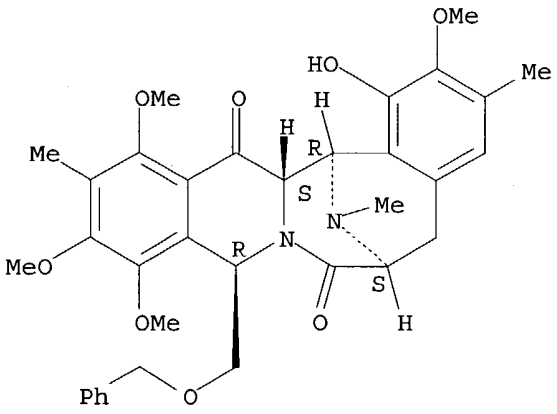
RN 351378-24-0 CAPLUS
CN 6,15-Imino-5H-isoquino[3,2-b][3]benzazocine-7,14(6H,9H)-dione, 14a,15-dihydro-2,10,11,13-tetramethoxy-3,12,16-trimethyl-1-(phenylmethoxy)-9-[(phenylmethoxy)methyl]-, (6S,9R,14aS,15R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



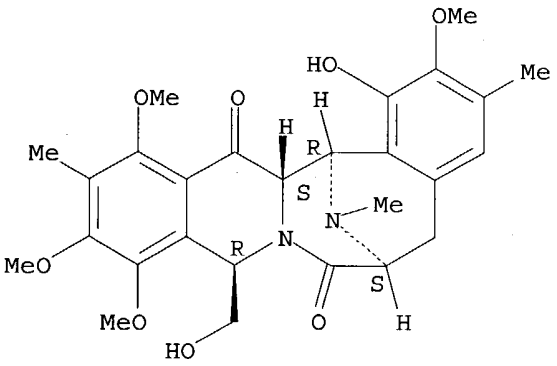
RN 351378-26-2 CAPLUS
CN 6,15-Imino-5H-isoquino[3,2-b][3]benzazocine-7,14(6H,9H)-dione, 14a,15-dihydro-1-hydroxy-2,10,11,13-tetramethoxy-3,12,16-trimethyl-9-[(phenylmethoxy)methyl]-, (6S,9R,14aS,15R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



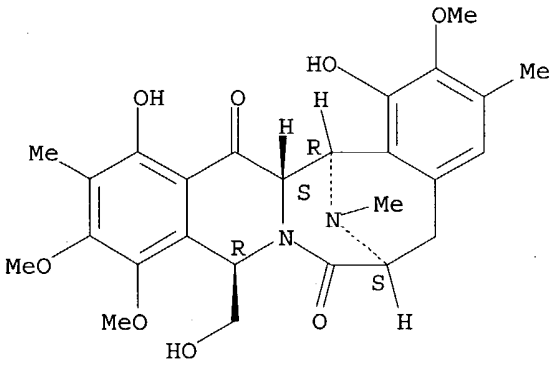
RN 351378-28-4 CAPLUS
CN 6,15-Imino-5H-isoquino[3,2-b][3]benzazocine-7,14(6H,9H)-dione, 14a,15-dihydro-1-hydroxy-9-(hydroxymethyl)-2,10,11,13-tetramethoxy-3,12,16-trimethyl-, (6S,9R,14aS,15R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



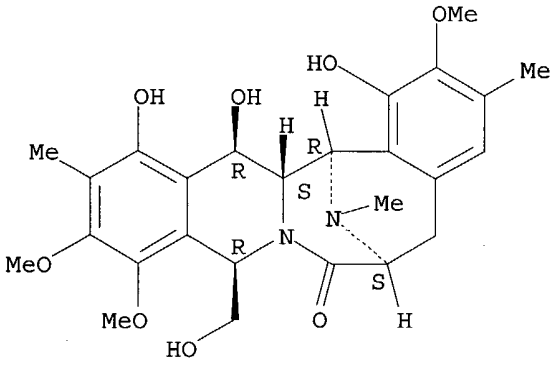
RN 351378-30-8 CAPLUS
CN 6,15-Imino-5H-isoquino[3,2-b][3]benzazocine-7,14(6H,9H)-dione, 14a,15-dihydro-1,13-dihydroxy-9-(hydroxymethyl)-2,10,11-trimethoxy-3,12,16-trimethyl-, (6S,9R,14aS,15R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



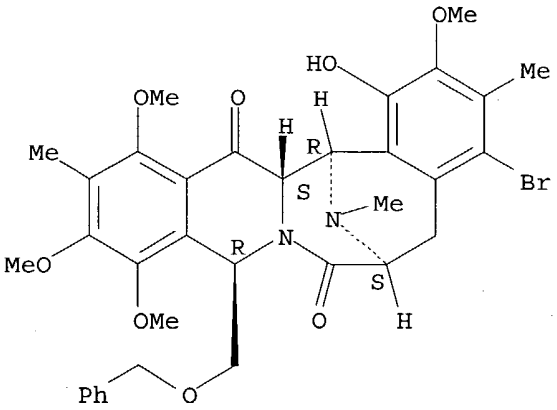
RN 351378-32-0 CAPLUS
CN 6,15-Imino-7H-isoquino[3,2-b][3]benzazocin-7-one, 5,6,9,14,14a,15-hexahydro-1,13,14-trihydroxy-9-(hydroxymethyl)-2,10,11-trimethoxy-3,12,16-trimethyl-, (6S,9R,14R,14aS,15R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



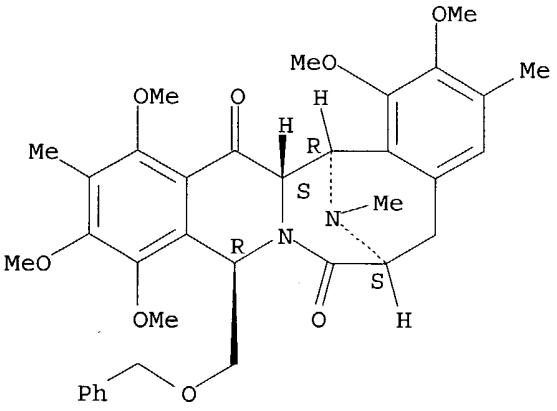
RN 351378-43-3 CAPLUS
CN 6,15-Imino-5H-isoquino[3,2-b][3]benzazocine-7,14(6H,9H)-dione, 4-bromo-14a,15-dihydro-1-hydroxy-2,10,11,13-tetramethoxy-3,12,16-trimethyl-9-[(phenylmethoxy)methyl]-, (6S,9R,14aS,15R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



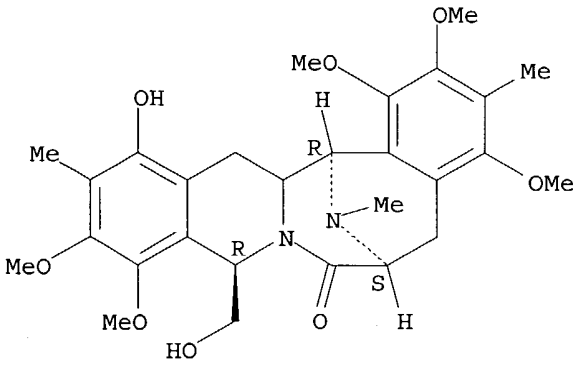
RN 351378-57-9 CAPLUS
CN 6,15-Imino-5H-isoquino[3,2-b][3]benzazocine-7,14(6H,9H)-dione, 14a,15-dihydro-1,2,10,11,13-pentamethoxy-3,12,16-trimethyl-9-[(phenylmethoxy)methyl]-, (6S,9R,14aS,15R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



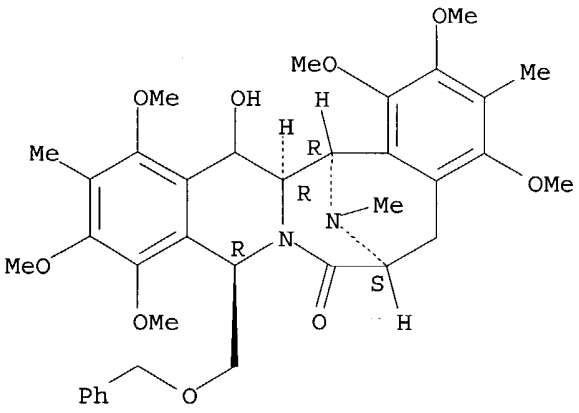
RN 351378-78-4 CAPLUS
CN 6,15-Imino-7H-isoquino[3,2-b][3]benzazocin-7-one, 5,6,9,14,14a,15-hexahydro-13-hydroxy-9-(hydroxymethyl)-1,2,4,10,11-pentamethoxy-3,12,16-trimethyl-, (6S,9R,15R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



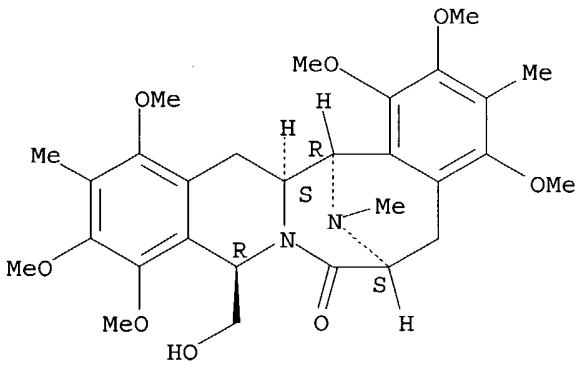
RN 351379-71-0 CAPLUS
CN 6,15-Imino-7H-isoquino[3,2-b][3]benzazocin-7-one, 5,6,9,14,14a,15-hexahydro-14-hydroxy-1,2,4,10,11,13-hexamethoxy-3,12,16-trimethyl-9-[(phenylmethoxy)methyl]-, (6S,9R,14aR,15R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



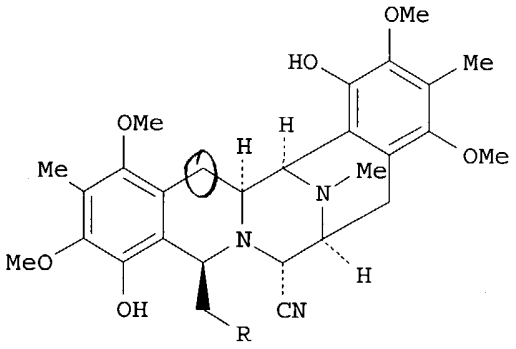
RN 351379-73-2 CAPLUS
CN 6,15-Imino-7H-isoquino[3,2-b][3]benzazocin-7-one, 5,6,9,14,14a,15-hexahydro-9-(hydroxymethyl)-1,2,4,10,11,13-hexamethoxy-3,12,16-trimethyl-, (6S,9R,14aS,15R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



RE.CNT 2 THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 5 OF 22 CAPLUS COPYRIGHT 2004 ACS on STN
AN 2001:327067 CAPLUS
DN 135:92769
TI Synthesis and Evaluation of Bishydroquinone Derivatives of (-)-Saframycin A: Identification of a Versatile Molecular Template Imparting Potent Antiproliferative Activity
AU Myers, Andrew G.; Plowright, Alleyn T.
CS Department of Chemistry and Chemical Biology, Harvard University, Cambridge, MA, 02138, USA
SO Journal of the American Chemical Society (2001), 123(21), 5114-5115
CODEN: JACSAT; ISSN: 0002-7863
PB American Chemical Society
DT Journal
LA English
OS CASREACT 135:92769
GI

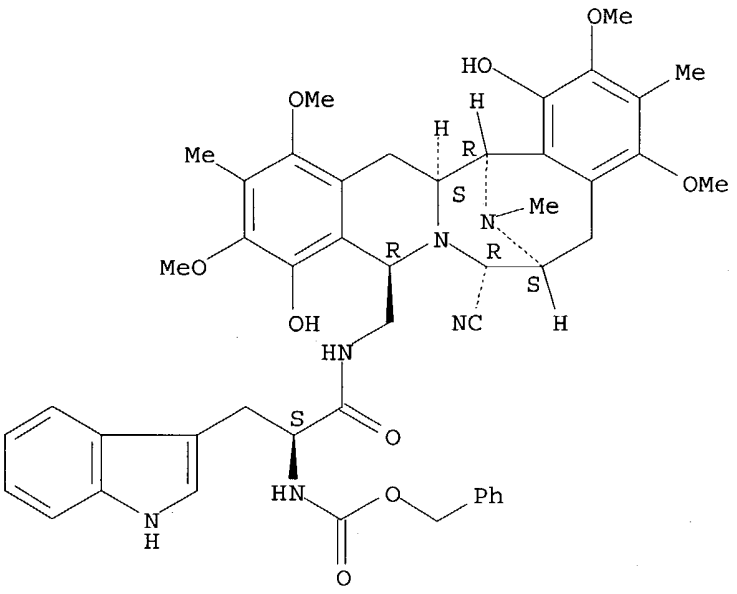


I

AB Saframycin A derivs. (I) were prepared and evaluated for antiproliferative activity against the human cancer cell lines A375 melanoma and A549 lung carcinoma.

IT **349103-56-6P**
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); RCT (Reactant); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation); RACT (Reactant or reagent)
(synthesis and antiproliferative activity of bishydroquinone derivs. of saframycin A)
RN 349103-56-6 CAPLUS
CN Carbamic acid, [(1S)-2-[[[(6S,7R,9R,14aS,15R)-7-cyano-6,7,9,14,14a,15-hexahydro-1,10-dihydroxy-2,4,11,13-tetramethoxy-3,12,16-trimethyl-6,15-imino-5H-isoquino[3,2-b][3]benzazocin-9-yl]methyl]amino]-1-(1H-indol-3-ylmethyl)-2-oxoethyl]-, phenylmethyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.

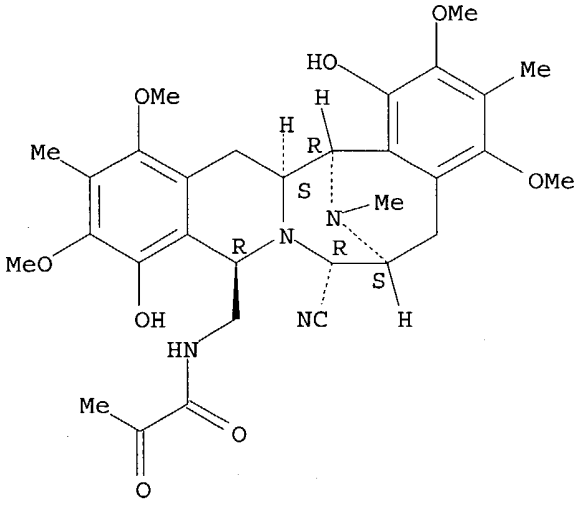


IT **253329-80-5P 349103-36-2P 349103-37-3P**
349103-38-4P 349103-39-5P 349103-40-8P
349103-41-9P 349103-42-0P 349103-43-1P
349103-44-2P 349103-45-3P 349103-48-6P
349103-49-7P 349103-50-0P 349103-51-1P
349103-52-2P 349103-53-3P 349103-54-4P
349103-55-5P 349103-57-7P 349103-58-8P
349103-59-9P 349103-60-2P 349103-61-3P
349103-62-4P 349103-63-5P 349103-64-6P
349103-65-7P 349103-66-8P 349103-67-9P
349103-68-0P 349103-69-1P 349103-70-4P
349103-71-5P 349103-72-6P 349103-73-7P
349103-74-8P 349103-75-9P 349103-76-0P
349103-77-1P 349103-78-2P 349103-79-3P
349103-80-6P 349103-81-7P 349103-82-8P
349103-83-9P 349103-84-0P 349103-85-1P
349103-86-2P 349103-87-3P 349103-88-4P
349103-89-5P 349103-90-8P 349103-91-9P
349103-92-0P 349103-93-1P 349103-94-2P
349103-95-3P 349103-96-4P 349103-97-5P
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation)
(synthesis and antiproliferative activity of bishydroquinone derivs. of saframycin A)

RN 253329-80-5 CAPLUS

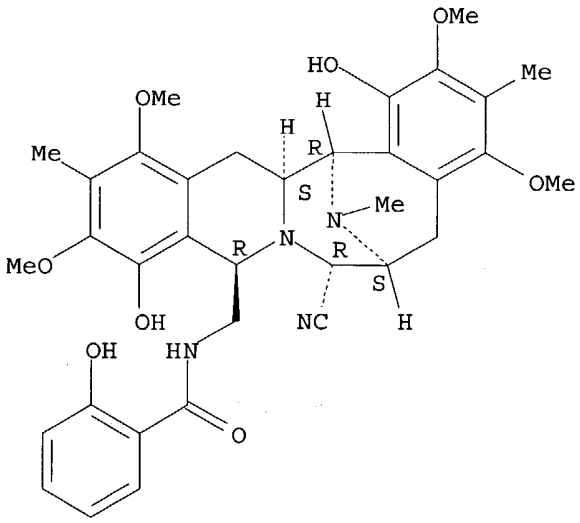
CN Propanamide, N-[[(6S,7R,9R,14aS,15R)-7-cyano-6,7,9,14,14a,15-hexahydro-1,10-dihydroxy-2,4,11,13-tetramethoxy-3,12,16-trimethyl-6,15-imino-5H-isoquino[3,2-b][3]benzazocin-9-yl]methyl]-2-oxo- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



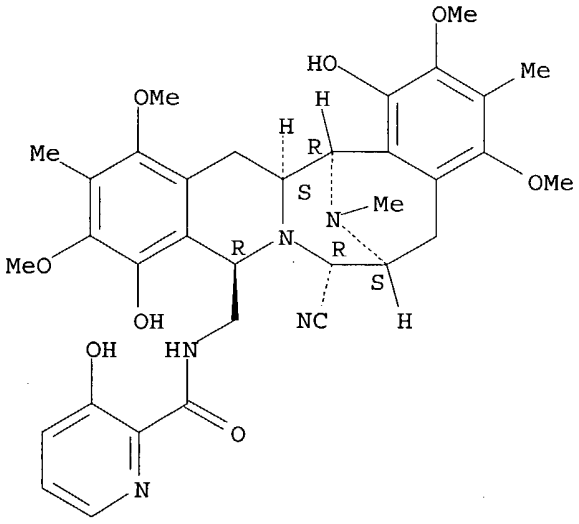
RN 349103-36-2 CAPLUS
CN Benzamide, N-[[(6S,7R,9R,14aS,15R)-7-cyano-6,7,9,14,14a,15-hexahydro-1,10-dihydroxy-2,4,11,13-tetramethoxy-3,12,16-trimethyl-6,15-imino-5H-isoquino[3,2-b][3]benzazocin-9-yl]methyl]-2-hydroxy- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



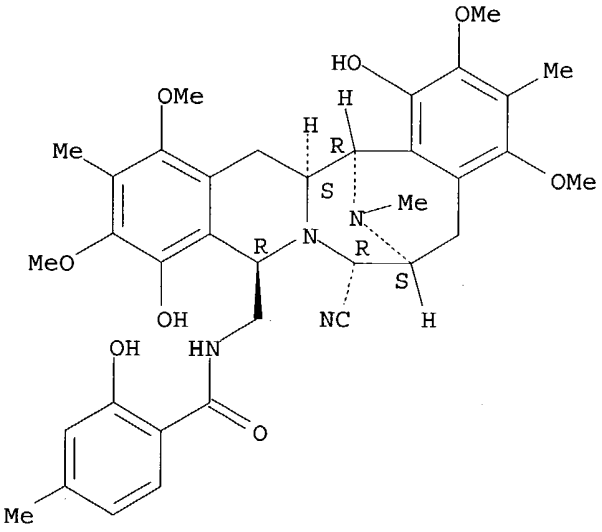
RN 349103-37-3 CAPLUS
CN 2-Pyridinecarboxamide, N-[[(6S,7R,9R,14aS,15R)-7-cyano-6,7,9,14,14a,15-hexahydro-1,10-dihydroxy-2,4,11,13-tetramethoxy-3,12,16-trimethyl-6,15-imino-5H-isoquino[3,2-b][3]benzazocin-9-yl]methyl]-3-hydroxy- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



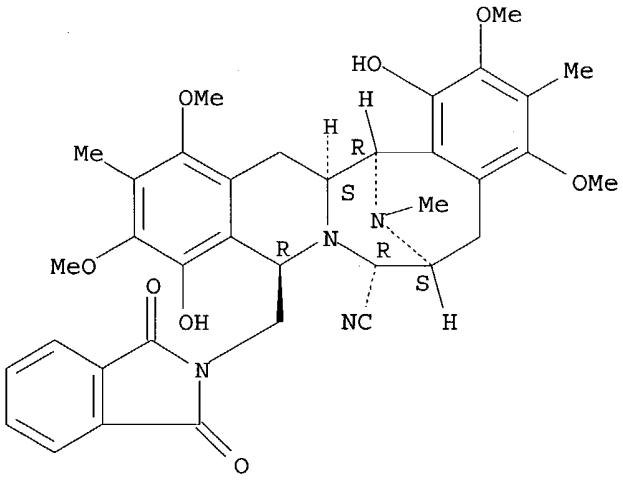
RN 349103-38-4 CAPLUS
CN Benzamide, N-[[(6S,7R,9R,14aS,15R)-7-cyano-6,7,9,14,14a,15-hexahydro-1,10-dihydroxy-2,4,11,13-tetramethoxy-3,12,16-trimethyl-6,15-imino-5H-isoquino[3,2-b][3]benzazocin-9-yl]methyl]-2-hydroxy-4-methyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



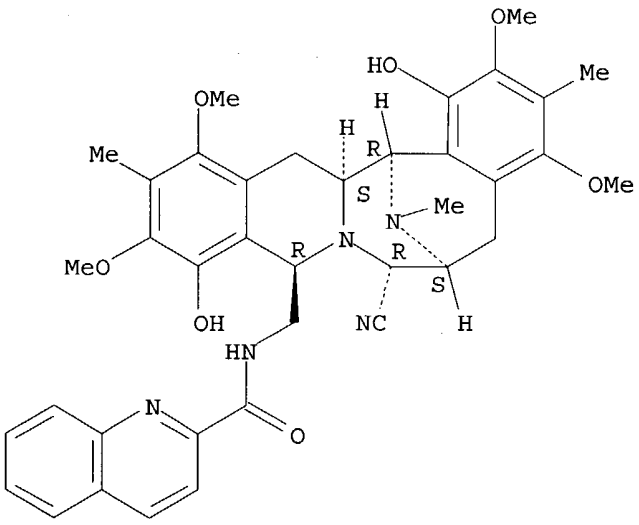
RN 349103-39-5 CAPLUS
CN 6,15-Imino-5H-isoquino[3,2-b][3]benzazocine-7-carbonitrile, 9-[(1,3-dihydro-1,3-dioxo-2H-isoindol-2-yl)methyl]-6,7,9,14,14a,15-hexahydro-1,10-dihydroxy-2,4,11,13-tetramethoxy-3,12,16-trimethyl-, (6S,7R,9R,14aS,15R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



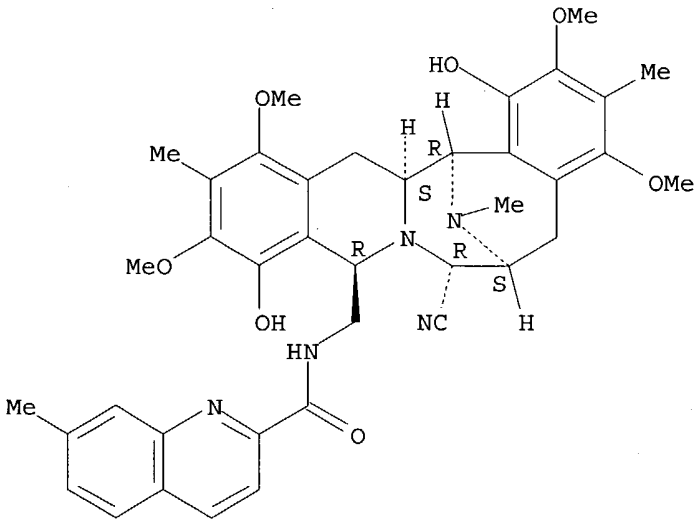
RN 349103-40-8 CAPLUS
CN 2-Quinolinecarboxamide, N-[[(6S,7R,9R,14aS,15R)-7-cyano-6,7,9,14,14a,15-hexahydro-1,10-dihydroxy-2,4,11,13-tetramethoxy-3,12,16-trimethyl-6,15-imino-5H-isoquino[3,2-b][3]benzazocin-9-yl]methyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



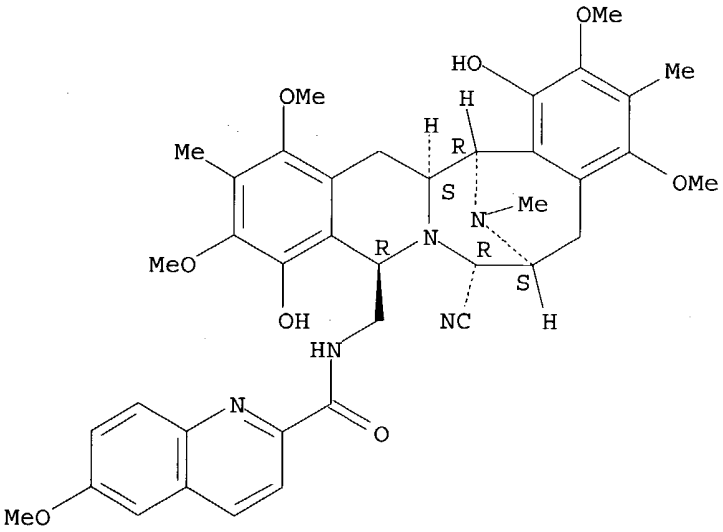
RN 349103-41-9 CAPLUS
CN 2-Quinolinecarboxamide, N-[[(6S,7R,9R,14aS,15R)-7-cyano-6,7,9,14,14a,15-hexahydro-1,10-dihydroxy-2,4,11,13-tetramethoxy-3,12,16-trimethyl-6,15-imino-5H-isoquino[3,2-b][3]benzazocin-9-yl]methyl]-7-methyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



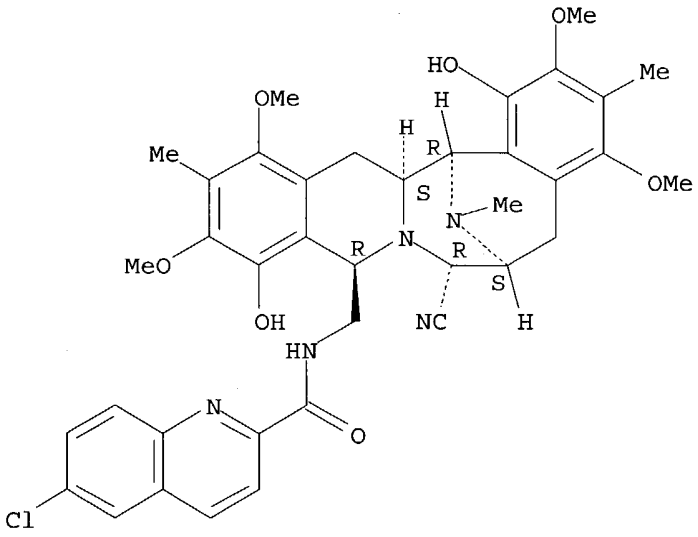
RN 349103-42-0 CAPLUS
CN 2-Quinolinecarboxamide, N-[[(6S,7R,9R,14aS,15R)-7-cyano-6,7,9,14,14a,15-hexahydro-1,10-dihydroxy-2,4,11,13-tetramethoxy-3,12,16-trimethyl-6,15-imino-5H-isoquino[3,2-b][3]benzazocin-9-yl]methyl]-6-methoxy- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



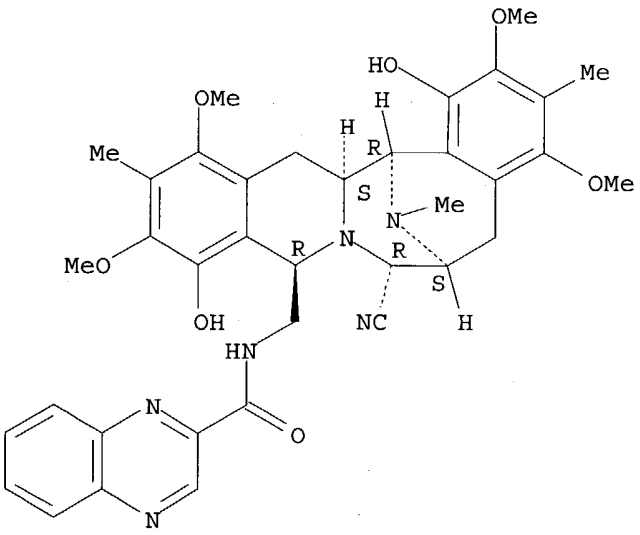
RN 349103-43-1 CAPLUS
CN 2-Quinolinecarboxamide, 6-chloro-N-[[(6S,7R,9R,14aS,15R)-7-cyano-6,7,9,14,14a,15-hexahydro-1,10-dihydroxy-2,4,11,13-tetramethoxy-3,12,16-trimethyl-6,15-imino-5H-isoquino[3,2-b][3]benzazocin-9-yl]methyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



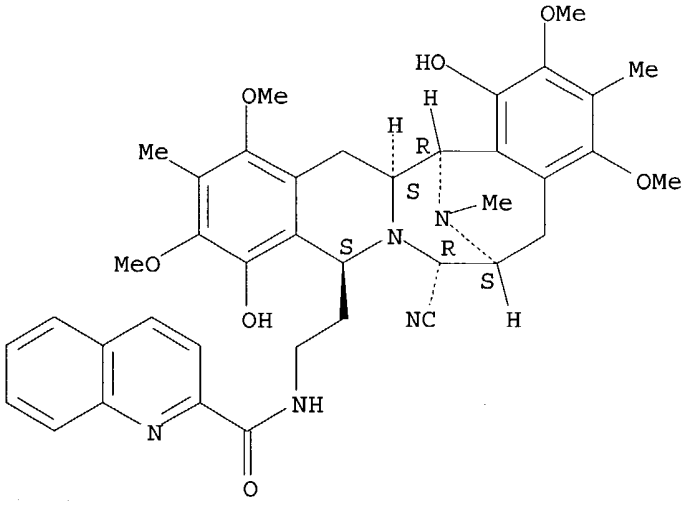
RN 349103-44-2 CAPLUS
CN 2-Quinoxalinecarboxamide, N-[[(6S,7R,9R,14aS,15R)-7-cyano-6,7,9,14,14a,15-hexahydro-1,10-dihydroxy-2,4,11,13-tetramethoxy-3,12,16-trimethyl-6,15-imino-5H-isoquino[3,2-b][3]benzazocin-9-yl]methyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



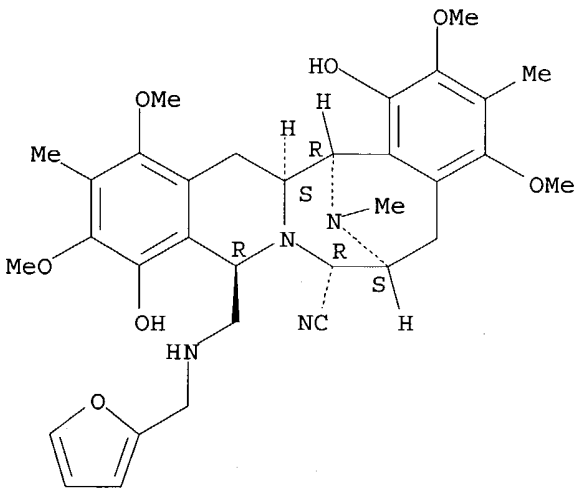
RN 349103-45-3 CAPLUS
CN 2-Quinolinecarboxamide, N-[2-[(6S,7R,9S,14aS,15R)-7-cyano-6,7,9,14,14a,15-hexahydro-1,10-dihydroxy-2,4,11,13-tetramethoxy-3,12,16-trimethyl-6,15-imino-5H-isoquino[3,2-b][3]benzazocin-9-yl]ethyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



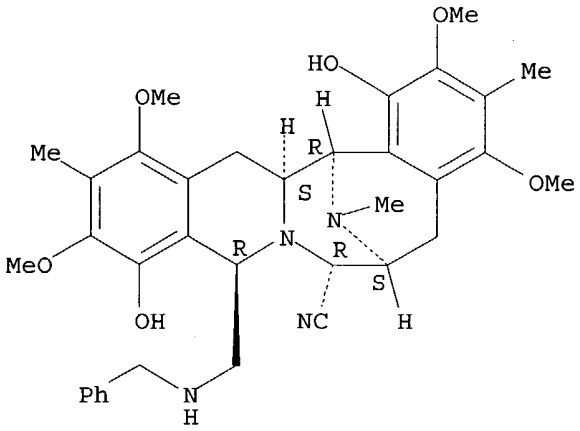
RN 349103-48-6 CAPLUS
CN 6,15-Imino-5H-isoquino[3,2-b][3]benzazocine-7-carbonitrile, 9-[[(2-furanylmethyl)amino]methyl]-6,7,9,14,14a,15-hexahydro-1,10-dihydroxy-2,4,11,13-tetramethoxy-3,12,16-trimethyl-, (6S,7R,9R,14aS,15R)-(9CI) (CA INDEX NAME)

Absolute stereochemistry.



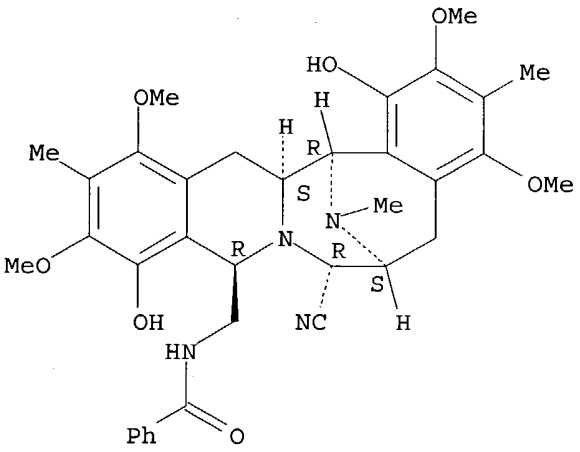
RN 349103-49-7 CAPLUS
CN 6,15-Imino-5H-isoquino[3,2-b][3]benzazocine-7-carbonitrile, 6,7,9,14,14a,15-hexahydro-1,10-dihydroxy-2,4,11,13-tetramethoxy-3,12,16-trimethyl-9-[[(phenylmethyl)amino]methyl]-, (6S,7R,9R,14aS,15R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



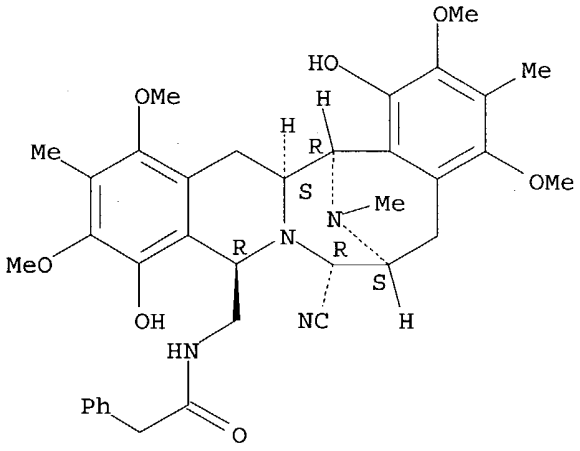
RN 349103-50-0 CAPLUS
CN Benzamide, N-[[(6S,7R,9R,14aS,15R)-7-cyano-6,7,9,14,14a,15-hexahydro-1,10-dihydroxy-2,4,11,13-tetramethoxy-3,12,16-trimethyl-6,15-imino-5H-isoquino[3,2-b][3]benzazocin-9-yl]methyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



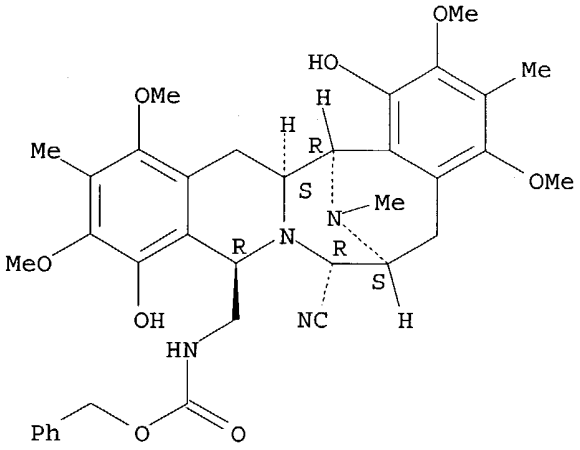
RN 349103-51-1 CAPLUS
CN Benzeneacetamide, N-[[(6S,7R,9R,14aS,15R)-7-cyano-6,7,9,14,14a,15-hexahydro-1,10-dihydroxy-2,4,11,13-tetramethoxy-3,12,16-trimethyl-6,15-imino-5H-isoquino[3,2-b][3]benzazocin-9-yl]methyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



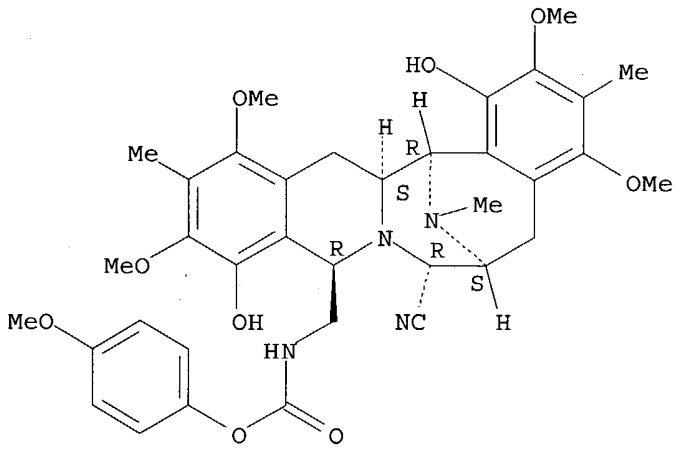
RN 349103-52-2 CAPLUS
CN Carbamic acid, [[(6S,7R,9R,14aS,15R)-7-cyano-6,7,9,14,14a,15-hexahydro-1,10-dihydroxy-2,4,11,13-tetramethoxy-3,12,16-trimethyl-6,15-imino-5H-isoquino[3,2-b][3]benzazocin-9-yl]methyl]-, phenylmethyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.



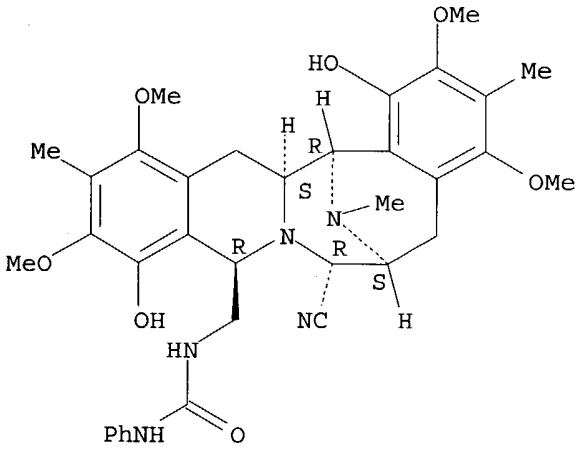
RN 349103-53-3 CAPLUS
CN Carbamic acid, [[(6S,7R,9R,14aS,15R)-7-cyano-6,7,9,14,14a,15-hexahydro-1,10-dihydroxy-2,4,11,13-tetramethoxy-3,12,16-trimethyl-6,15-imino-5H-isoquino[3,2-b][3]benzazocin-9-yl]methyl]-, 4-methoxyphenyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.



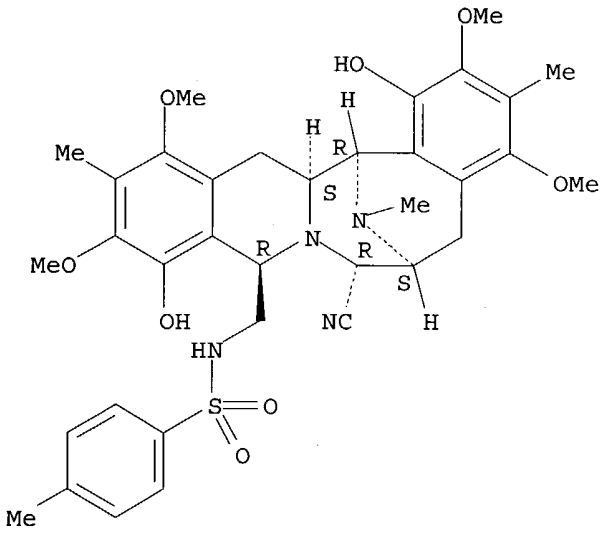
RN 349103-54-4 CAPLUS
CN Urea, N-[[(6S,7R,9R,14aS,15R)-7-cyano-6,7,9,14,14a,15-hexahydro-1,10-dihydroxy-2,4,11,13-tetramethoxy-3,12,16-trimethyl-6,15-imino-5H-isoquino[3,2-b][3]benzazocin-9-yl]methyl]-N'-phenyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



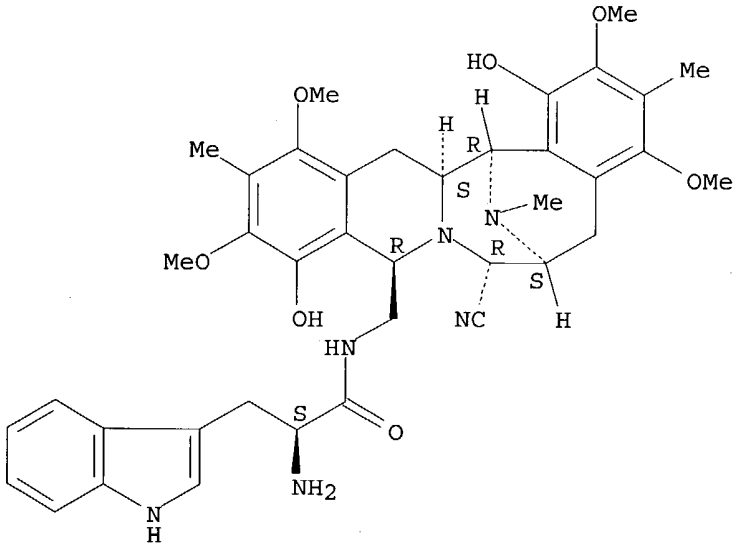
RN 349103-55-5 CAPLUS
CN Benzenesulfonamide, N-[[(6S,7R,9R,14aS,15R)-7-cyano-6,7,9,14,14a,15-hexahydro-1,10-dihydroxy-2,4,11,13-tetramethoxy-3,12,16-trimethyl-6,15-imino-5H-isoquino[3,2-b][3]benzazocin-9-yl]methyl]-4-methyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



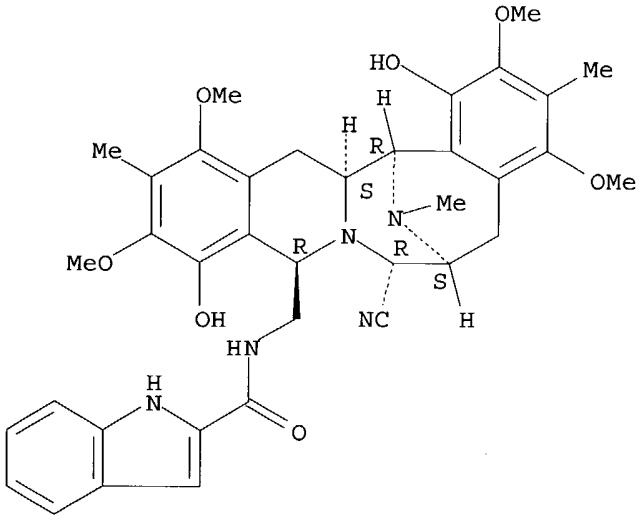
RN 349103-57-7 CAPLUS
CN 1H-Indole-3-propanamide, α-amino-N-[[(6S,7R,9R,14aS,15R)-7-cyano-6,7,9,14,14a,15-hexahydro-1,10-dihydroxy-2,4,11,13-tetramethoxy-3,12,16-trimethyl-6,15-imino-5H-isoquino[3,2-b][3]benzazocin-9-yl]methyl]-, (αS)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



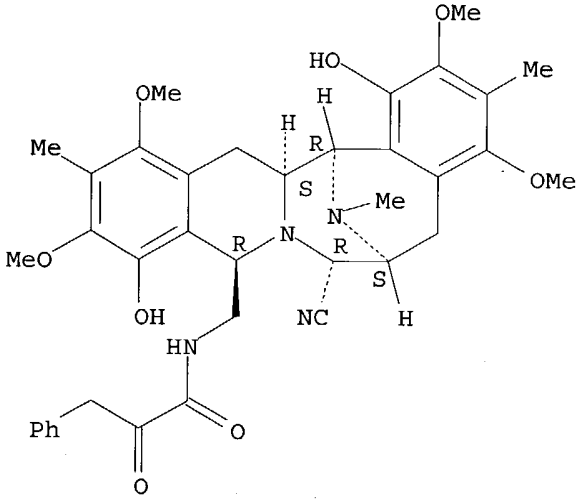
RN 349103-58-8 CAPLUS
CN 1H-Indole-2-carboxamide, N-[[(6S,7R,9R,14aS,15R)-7-cyano-6,7,9,14,14a,15-hexahydro-1,10-dihydroxy-2,4,11,13-tetramethoxy-3,12,16-trimethyl-6,15-imino-5H-isoquino[3,2-b][3]benzazocin-9-yl]methyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



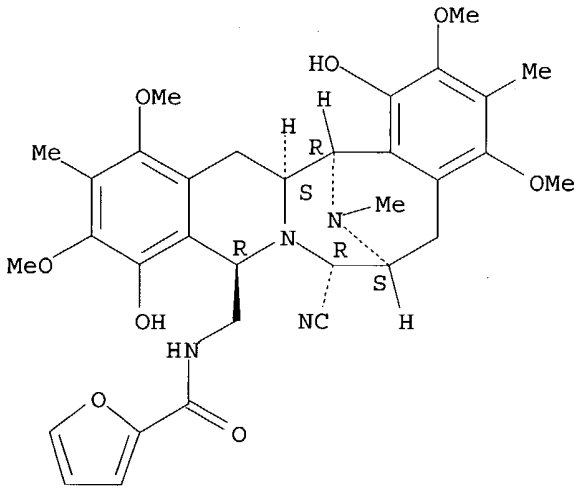
RN 349103-59-9 CAPLUS
CN Benzenepropanamide, N-[[(6S,7R,9R,14aS,15R)-7-cyano-6,7,9,14,14a,15-hexahydro-1,10-dihydroxy-2,4,11,13-tetramethoxy-3,12,16-trimethyl-6,15-imino-5H-isoquino[3,2-b][3]benzazocin-9-yl]methyl]-α-oxo- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



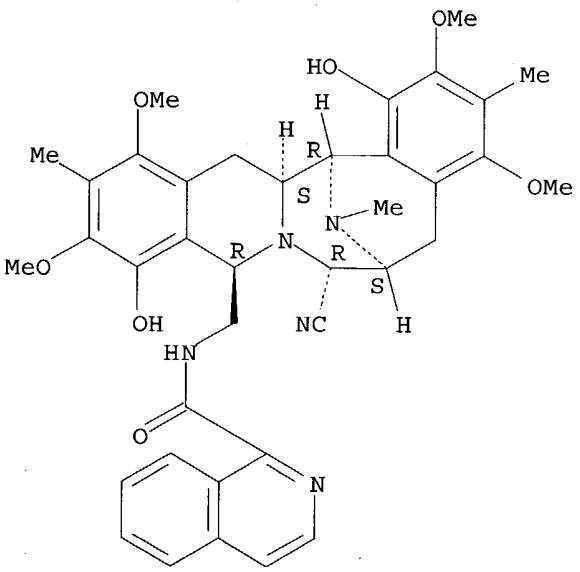
RN 349103-60-2 CAPLUS
CN 2-Furancarboxamide, N-[[(6S,7R,9R,14aS,15R)-7-cyano-6,7,9,14,14a,15-hexahydro-1,10-dihydroxy-2,4,11,13-tetramethoxy-3,12,16-trimethyl-6,15-imino-5H-isoquino[3,2-b][3]benzazocin-9-yl]methyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



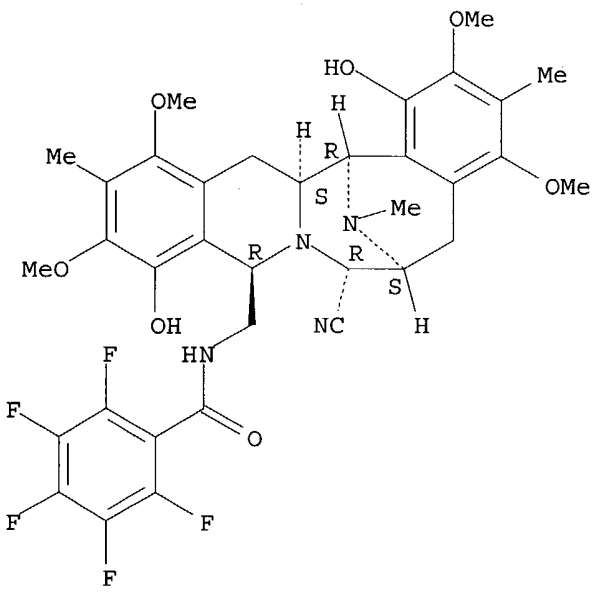
RN 349103-61-3 CAPLUS
CN 1-Isoquinolinecarboxamide, N-[[(6S,7R,9R,14aS,15R)-7-cyano-6,7,9,14,14a,15-hexahydro-1,10-dihydroxy-2,4,11,13-tetramethoxy-3,12,16-trimethyl-6,15-imino-5H-isoquino[3,2-b][3]benzazocin-9-yl]methyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



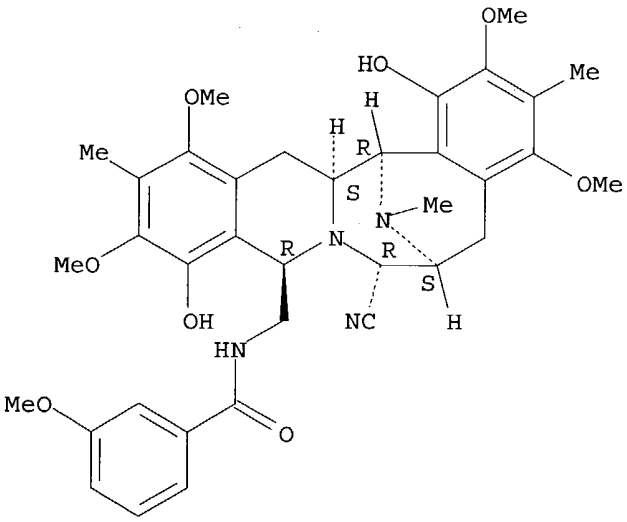
RN 349103-62-4 CAPLUS
CN Benzamide, N-[[(6S,7R,9R,14aS,15R)-7-cyano-6,7,9,14,14a,15-hexahydro-1,10-dihydroxy-2,4,11,13-tetramethoxy-3,12,16-trimethyl-6,15-imino-5H-isoquino[3,2-b][3]benzazocin-9-yl]methyl]-2,3,4,5,6-pentafluoro- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



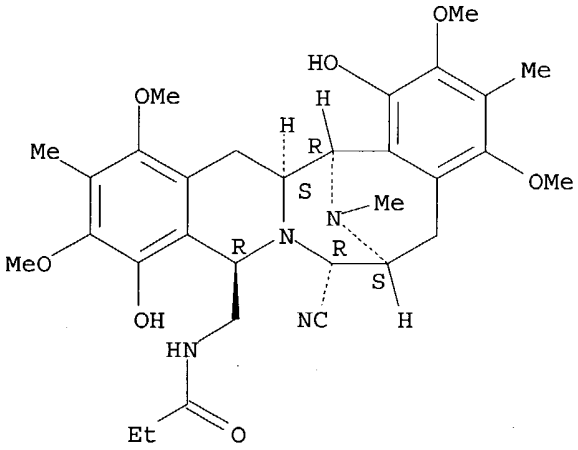
RN 349103-63-5 CAPLUS
CN Benzamide, N-[[(6S,7R,9R,14aS,15R)-7-cyano-6,7,9,14,14a,15-hexahydro-1,10-dihydroxy-2,4,11,13-tetramethoxy-3,12,16-trimethyl-6,15-imino-5H-isoquino[3,2-b][3]benzazocin-9-yl]methyl]-3-methoxy- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



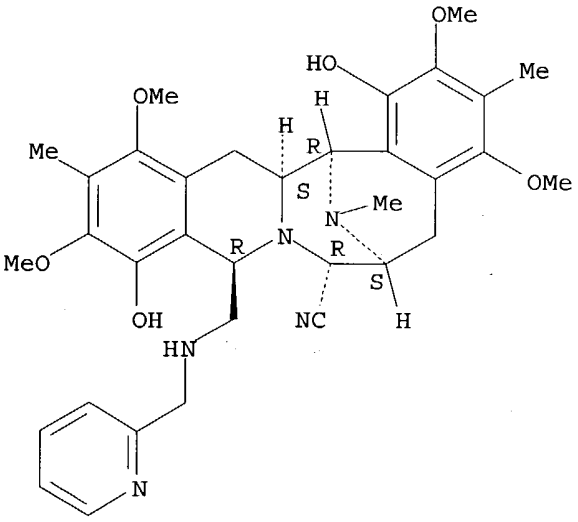
RN 349103-64-6 CAPLUS
CN Propanamide, N-[[(6S,7R,9R,14aS,15R)-7-cyano-6,7,9,14,14a,15-hexahydro-1,10-dihydroxy-2,4,11,13-tetramethoxy-3,12,16-trimethyl-6,15-imino-5H-isoquino[3,2-b][3]benzazocin-9-yl]methyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



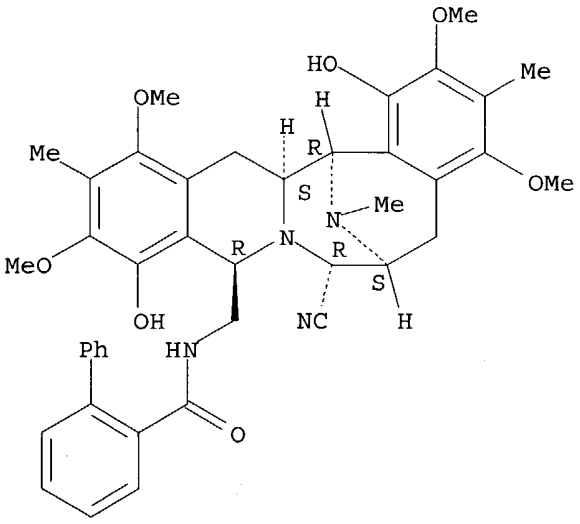
RN 349103-65-7 CAPLUS
CN 6,15-Imino-5H-isoquino[3,2-b][3]benzazocine-7-carbonitrile, 6,7,9,14,14a,15-hexahydro-1,10-dihydroxy-2,4,11,13-tetramethoxy-3,12,16-trimethyl-9-[[(2-pyridinylmethyl)amino]methyl]-, (6S,7R,9R,14aS,15R)-(9CI) (CA INDEX NAME)

Absolute stereochemistry.



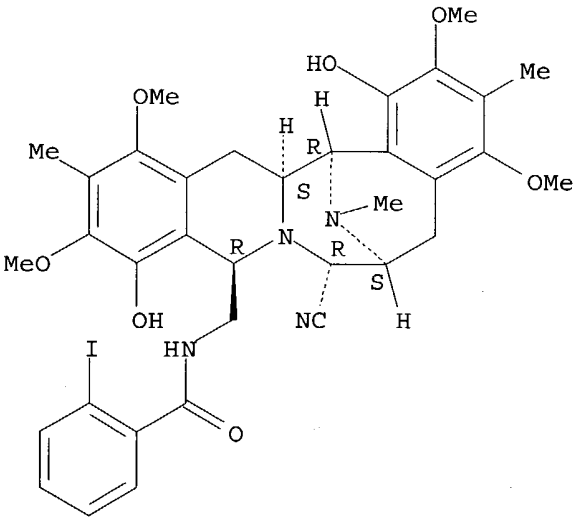
RN 349103-66-8 CAPLUS
CN [1,1'-Biphenyl]-2-carboxamide, N-[[(6S,7R,9R,14aS,15R)-7-cyano-6,7,9,14,14a,15-hexahydro-1,10-dihydroxy-2,4,11,13-tetramethoxy-3,12,16-trimethyl-6,15-imino-5H-isoquino[3,2-b][3]benzazocin-9-yl]methyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



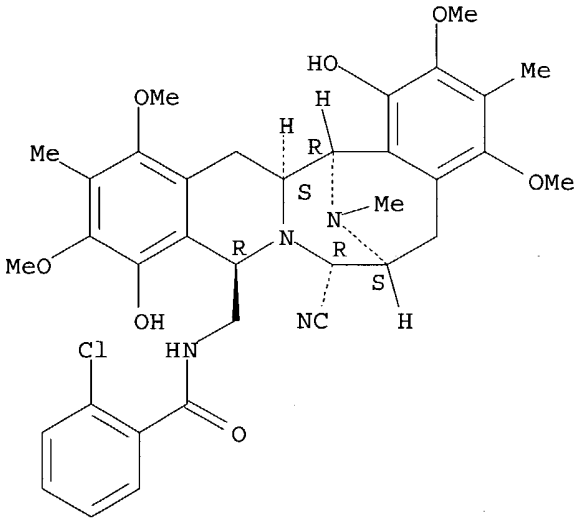
RN 349103-67-9 CAPLUS
CN Benzamide, N-[[(6S,7R,9R,14aS,15R)-7-cyano-6,7,9,14,14a,15-hexahydro-1,10-dihydroxy-2,4,11,13-tetramethoxy-3,12,16-trimethyl-6,15-imino-5H-isoquino[3,2-b][3]benzazocin-9-yl]methyl]-2-iodo- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



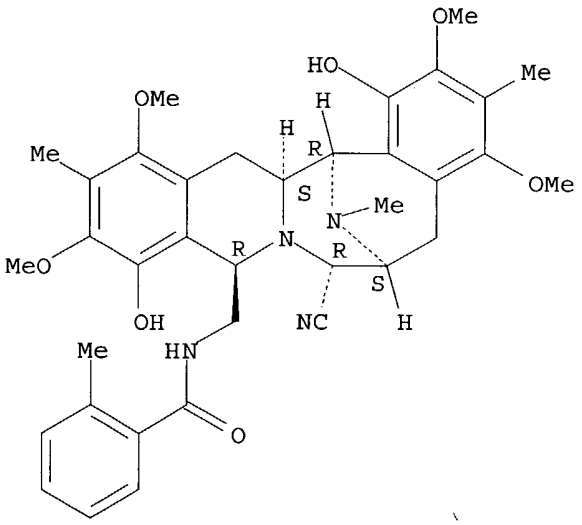
RN 349103-68-0 CAPLUS
CN Benzamide, 2-chloro-N-[[(6S,7R,9R,14aS,15R)-7-cyano-6,7,9,14,14a,15-hexahydro-1,10-dihydroxy-2,4,11,13-tetramethoxy-3,12,16-trimethyl-6,15-imino-5H-isoquino[3,2-b][3]benzazocin-9-yl]methyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



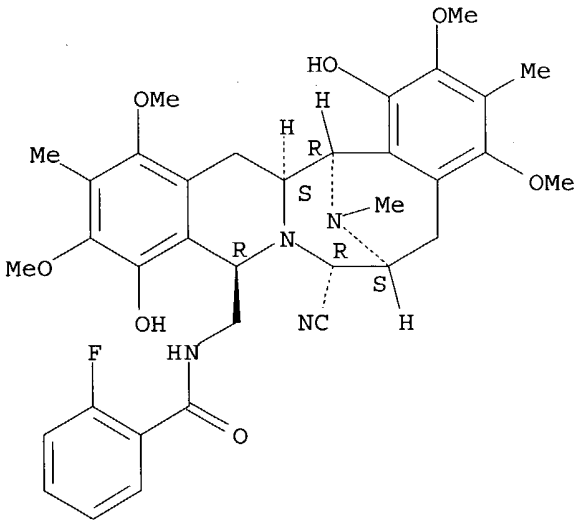
RN 349103-69-1 CAPLUS
CN Benzamide, N-[[(6S,7R,9R,14aS,15R)-7-cyano-6,7,9,14,14a,15-hexahydro-1,10-dihydroxy-2,4,11,13-tetramethoxy-3,12,16-trimethyl-6,15-imino-5H-isoquino[3,2-b][3]benzazocin-9-yl]methyl]-2-methyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



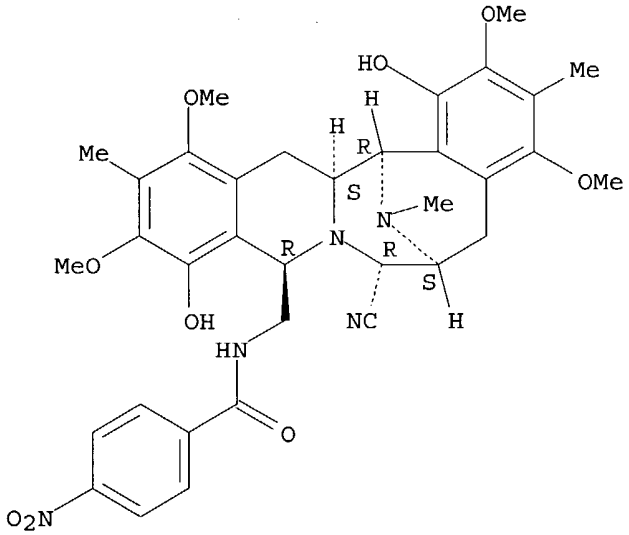
RN 349103-70-4 CAPLUS
CN Benzamide, N-[[(6S,7R,9R,14aS,15R)-7-cyano-6,7,9,14,14a,15-hexahydro-1,10-dihydroxy-2,4,11,13-tetramethoxy-3,12,16-trimethyl-6,15-imino-5H-isoquino[3,2-b][3]benzazocin-9-yl]methyl]-2-fluoro- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



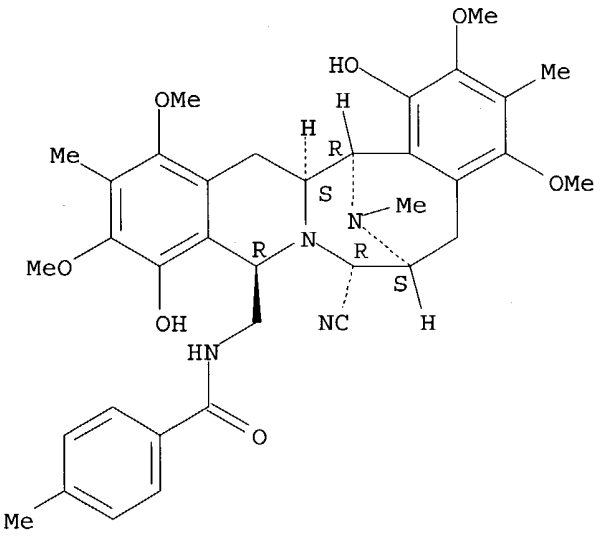
RN 349103-71-5 CAPLUS
CN Benzamide, N-[[(6S,7R,9R,14aS,15R)-7-cyano-6,7,9,14,14a,15-hexahydro-1,10-dihydroxy-2,4,11,13-tetramethoxy-3,12,16-trimethyl-6,15-imino-5H-isoquino[3,2-b][3]benzazocin-9-yl]methyl]-4-nitro- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



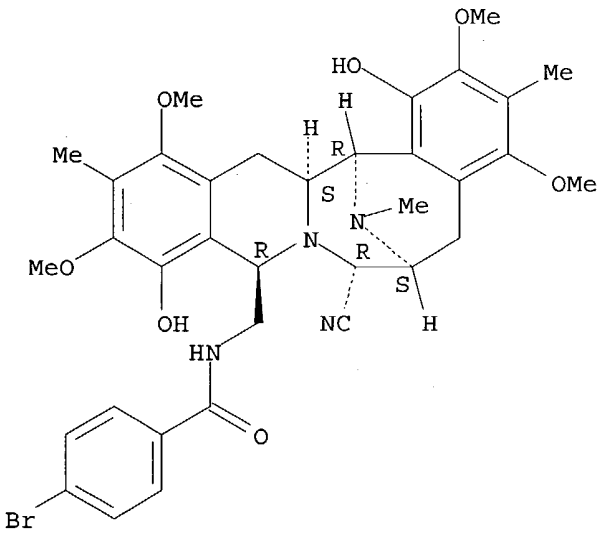
RN 349103-72-6 CAPLUS
CN Benzamide, N-[[(6S,7R,9R,14aS,15R)-7-cyano-6,7,9,14,14a,15-hexahydro-1,10-dihydroxy-2,4,11,13-tetramethoxy-3,12,16-trimethyl-6,15-imino-5H-isoquino[3,2-b][3]benzazocin-9-yl]methyl]-4-methyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



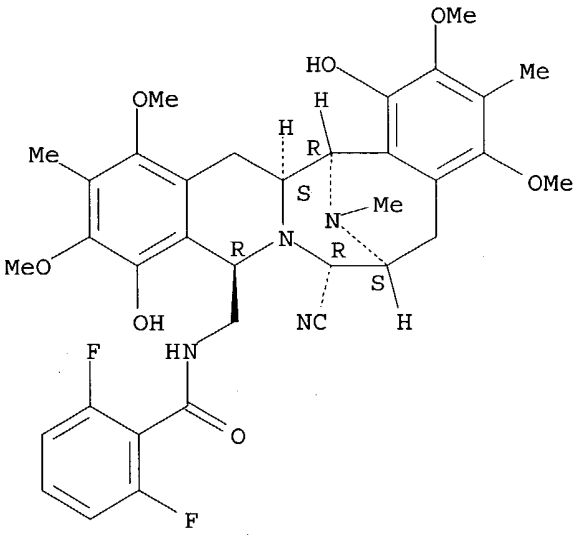
RN 349103-73-7 CAPLUS
CN Benzamide, 4-bromo-N-[[(6S,7R,9R,14aS,15R)-7-cyano-6,7,9,14,14a,15-hexahydro-1,10-dihydroxy-2,4,11,13-tetramethoxy-3,12,16-trimethyl-6,15-imino-5H-isoquino[3,2-b][3]benzazocin-9-yl]methyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



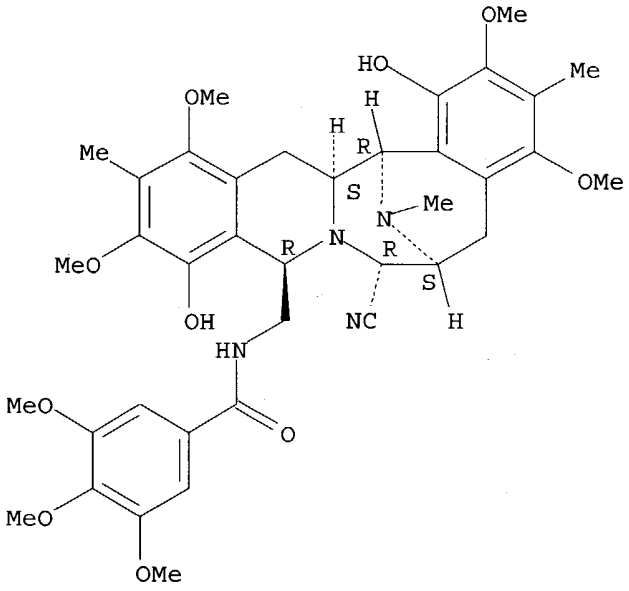
RN 349103-74-8 CAPLUS
CN Benzamide, N-[[(6S,7R,9R,14aS,15R)-7-cyano-6,7,9,14,14a,15-hexahydro-1,10-dihydroxy-2,4,11,13-tetramethoxy-3,12,16-trimethyl-6,15-imino-5H-isoquino[3,2-b][3]benzazocin-9-yl]methyl]-2,6-difluoro- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



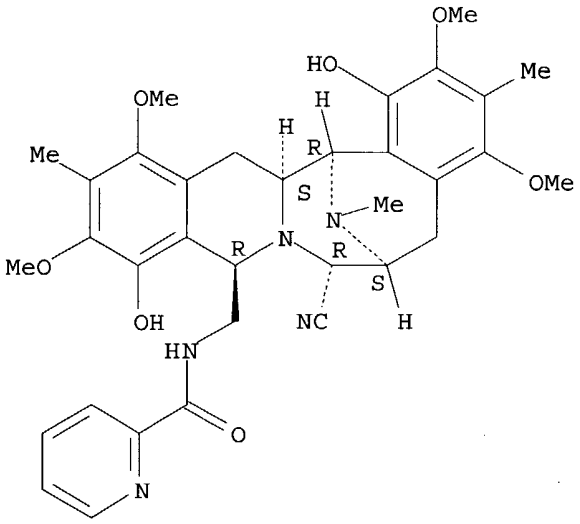
RN 349103-75-9 CAPLUS
CN Benzamide, N-[[(6S,7R,9R,14aS,15R)-7-cyano-6,7,9,14,14a,15-hexahydro-1,10-dihydroxy-2,4,11,13-tetramethoxy-3,12,16-trimethyl-6,15-imino-5H-isoquino[3,2-b][3]benzazocin-9-yl]methyl]-3,4,5-trimethoxy- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



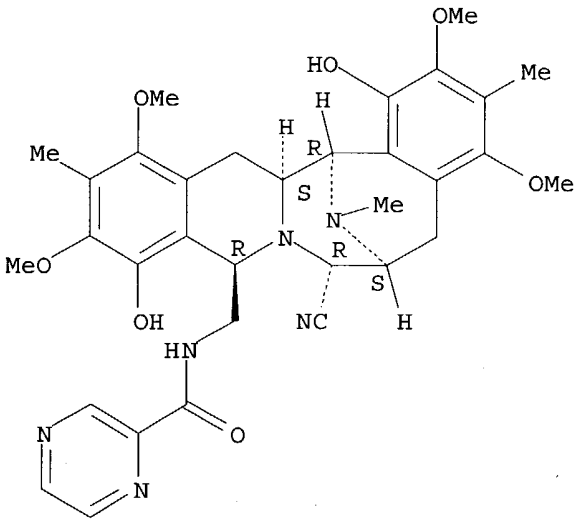
RN 349103-76-0 CAPLUS
CN 2-Pyridinecarboxamide, N-[[(6S,7R,9R,14aS,15R)-7-cyano-6,7,9,14,14a,15-hexahydro-1,10-dihydroxy-2,4,11,13-tetramethoxy-3,12,16-trimethyl-6,15-imino-5H-isoquino[3,2-b][3]benzazocin-9-yl]methyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



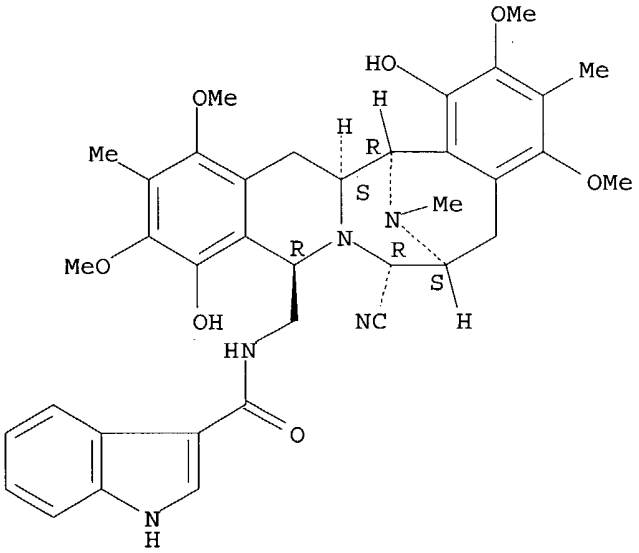
RN 349103-77-1 CAPLUS
CN Pyrazinecarboxamide, N-[[(6S,7R,9R,14aS,15R)-7-cyano-6,7,9,14,14a,15-hexahydro-1,10-dihydroxy-2,4,11,13-tetramethoxy-3,12,16-trimethyl-6,15-imino-5H-isoquino[3,2-b][3]benzazocin-9-yl]methyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



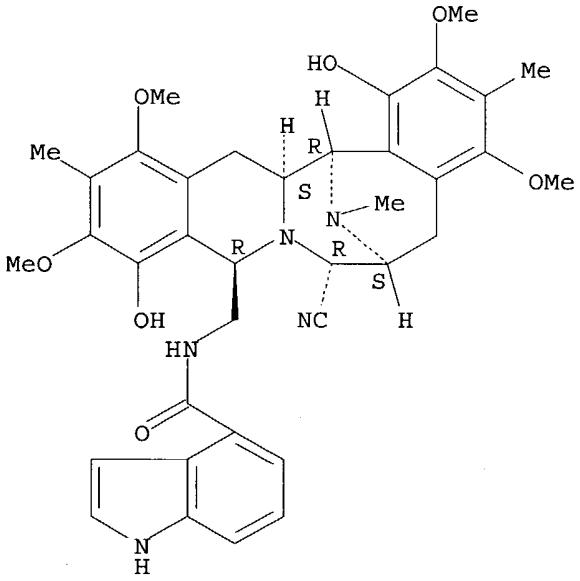
RN 349103-78-2 CAPLUS
CN 1H-Indole-3-carboxamide, N-[[(6S,7R,9R,14aS,15R)-7-cyano-6,7,9,14,14a,15-hexahydro-1,10-dihydroxy-2,4,11,13-tetramethoxy-3,12,16-trimethyl-6,15-imino-5H-isoquino[3,2-b][3]benzazocin-9-yl]methyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



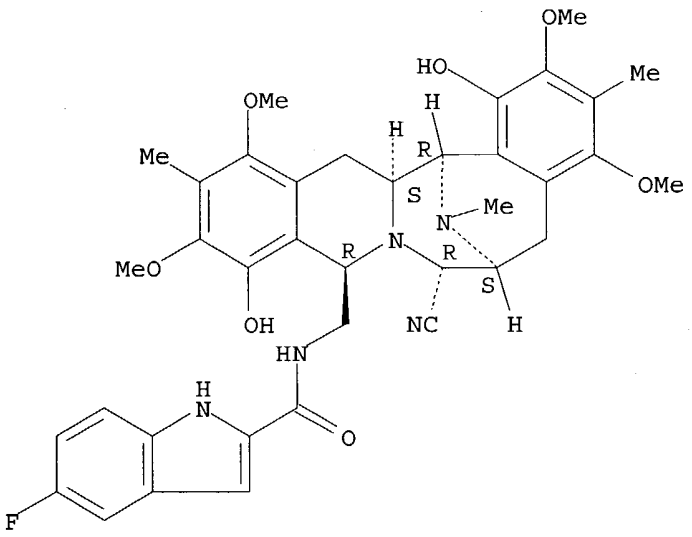
RN 349103-79-3 CAPLUS
CN 1H-Indole-4-carboxamide, N-[[(6S,7R,9R,14aS,15R)-7-cyano-6,7,9,14,14a,15-hexahydro-1,10-dihydroxy-2,4,11,13-tetramethoxy-3,12,16-trimethyl-6,15-imino-5H-isoquino[3,2-b][3]benzazocin-9-yl]methyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



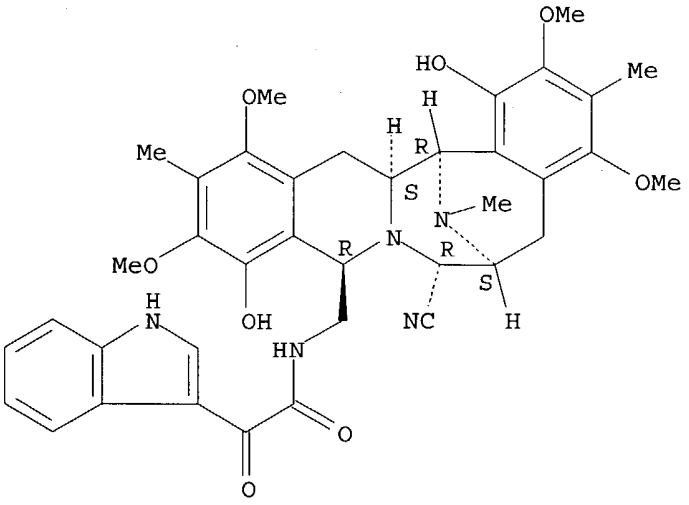
RN 349103-80-6 CAPLUS
CN 1H-Indole-2-carboxamide, N-[[(6S,7R,9R,14aS,15R)-7-cyano-6,7,9,14,14a,15-hexahydro-1,10-dihydroxy-2,4,11,13-tetramethoxy-3,12,16-trimethyl-6,15-imino-5H-isoquino[3,2-b][3]benzazocin-9-yl]methyl]-5-fluoro- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



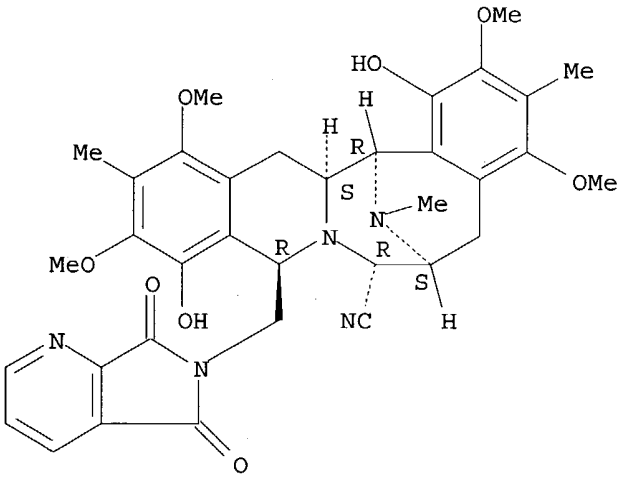
RN 349103-81-7 CAPLUS
CN 1H-Indole-3-acetamide, N-[[(6S,7R,9R,14aS,15R)-7-cyano-6,7,9,14,14a,15-hexahydro-1,10-dihydroxy-2,4,11,13-tetramethoxy-3,12,16-trimethyl-6,15-imino-5H-isoquino[3,2-b][3]benzazocin-9-yl]methyl]-α-oxo- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



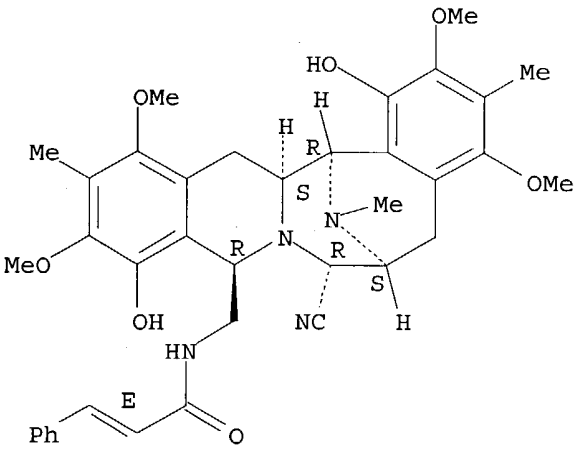
RN 349103-82-8 CAPLUS
CN 6,15-Imino-5H-isoquino[3,2-b][3]benzazocine-7-carbonitrile, 9-[(5,7-dihydro-5,7-dioxo-6H-pyrrolo[3,4-b]pyridin-6-yl)methyl]-6,7,9,14,14a,15-hexahydro-1,10-dihydroxy-2,4,11,13-tetramethoxy-3,12,16-trimethyl-, (6S,7R,9R,14aS,15R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



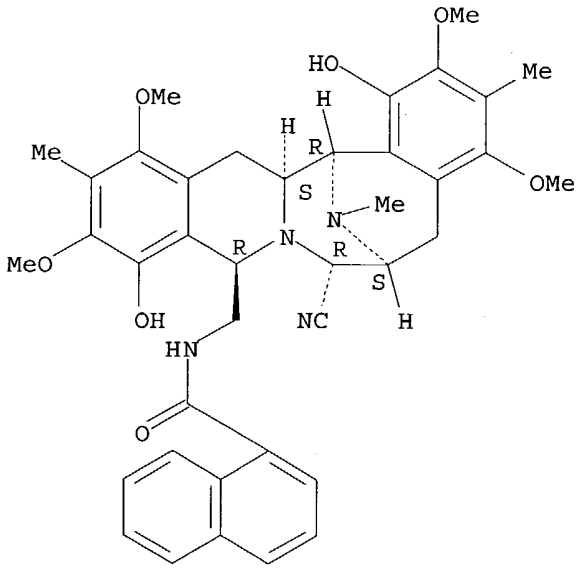
RN 349103-83-9 CAPLUS
CN 2-Propenamide, N-[[(6S,7R,9R,14aS,15R)-7-cyano-6,7,9,14,14a,15-hexahydro-1,10-dihydroxy-2,4,11,13-tetramethoxy-3,12,16-trimethyl-6,15-imino-5H-isoquino[3,2-b][3]benzazocin-9-yl]methyl]-3-phenyl-, (2E)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.
Double bond geometry as shown.



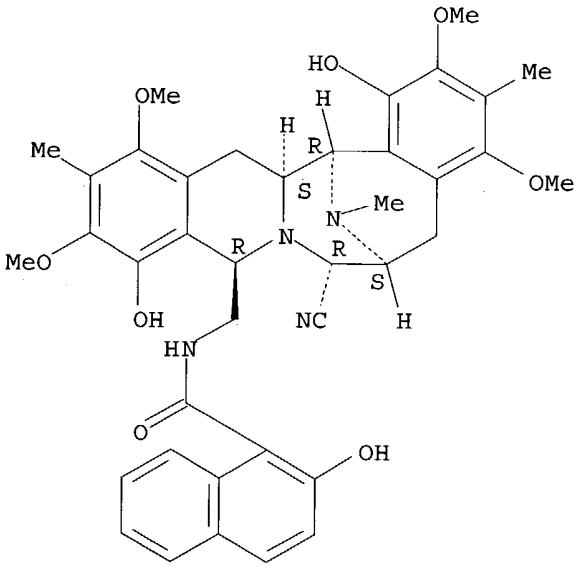
RN 349103-84-0 CAPLUS
CN 1-Naphthalenecarboxamide, N-[[(6S,7R,9R,14aS,15R)-7-cyano-6,7,9,14,14a,15-hexahydro-1,10-dihydroxy-2,4,11,13-tetramethoxy-3,12,16-trimethyl-6,15-imino-5H-isoquino[3,2-b][3]benzazocin-9-yl]methyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



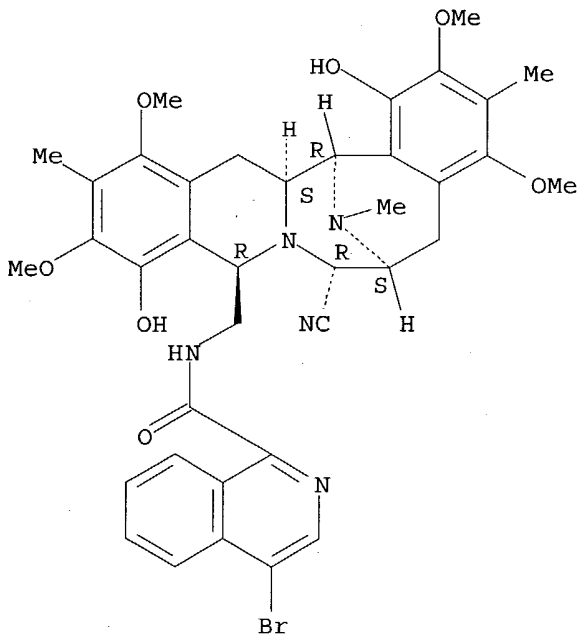
RN 349103-85-1 CAPLUS
CN 1-Naphthalenecarboxamide, N-[[(6S,7R,9R,14aS,15R)-7-cyano-6,7,9,14,14a,15-hexahydro-1,10-dihydroxy-2,4,11,13-tetramethoxy-3,12,16-trimethyl-6,15-imino-5H-isoquino[3,2-b][3]benzazocin-9-yl]methyl]-2-hydroxy- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



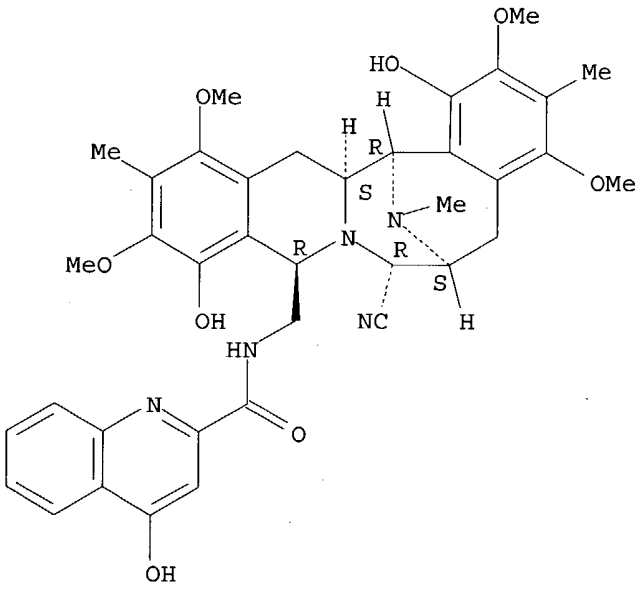
RN 349103-86-2 CAPLUS
CN 1-Isoquinolinecarboxamide, 4-bromo-N-[[(6S,7R,9R,14aS,15R)-7-cyano-6,7,9,14,14a,15-hexahydro-1,10-dihydroxy-2,4,11,13-tetramethoxy-3,12,16-trimethyl-6,15-imino-5H-isoquino[3,2-b][3]benzazocin-9-yl]methyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



RN 349103-87-3 CAPLUS
CN 2-Quinolinecarboxamide, N-[[(6S,7R,9R,14aS,15R)-7-cyano-6,7,9,14,14a,15-hexahydro-1,10-dihydroxy-2,4,11,13-tetramethoxy-3,12,16-trimethyl-6,15-imino-5H-isoquino[3,2-b][3]benzazocin-9-yl]methyl]-4-hydroxy- (9CI) (CA INDEX NAME)

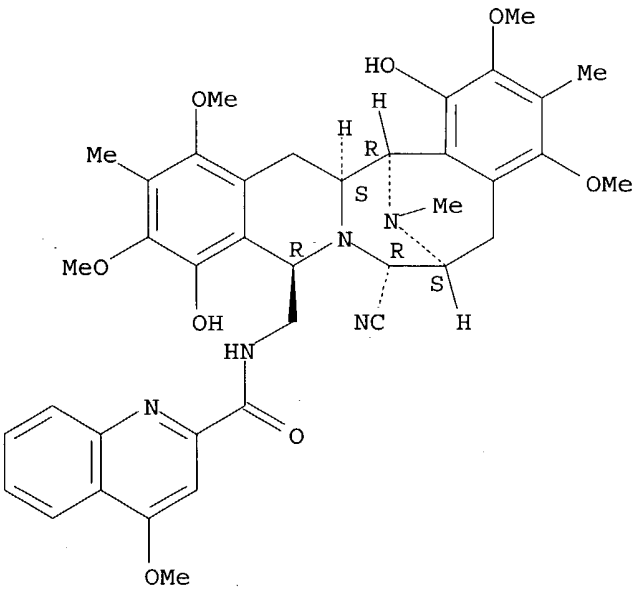
Absolute stereochemistry.



RN 349103-88-4 CAPLUS

CN 2-Quinolinecarboxamide, N-[[(6S,7R,9R,14aS,15R)-7-cyano-6,7,9,14,14a,15-hexahydro-1,10-dihydroxy-2,4,11,13-tetramethoxy-3,12,16-trimethyl-6,15-imino-5H-isoquino[3,2-b][3]benzazocin-9-yl]methyl]-4-methoxy- (9CI) (CA INDEX NAME)

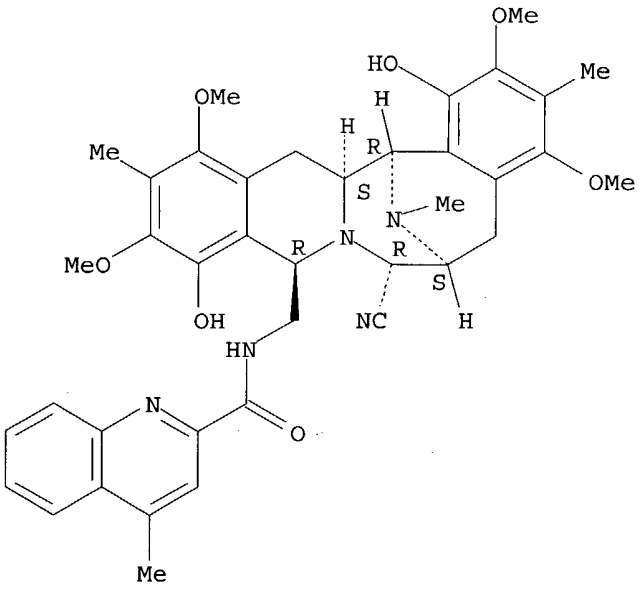
Absolute stereochemistry.



RN 349103-89-5 CAPLUS

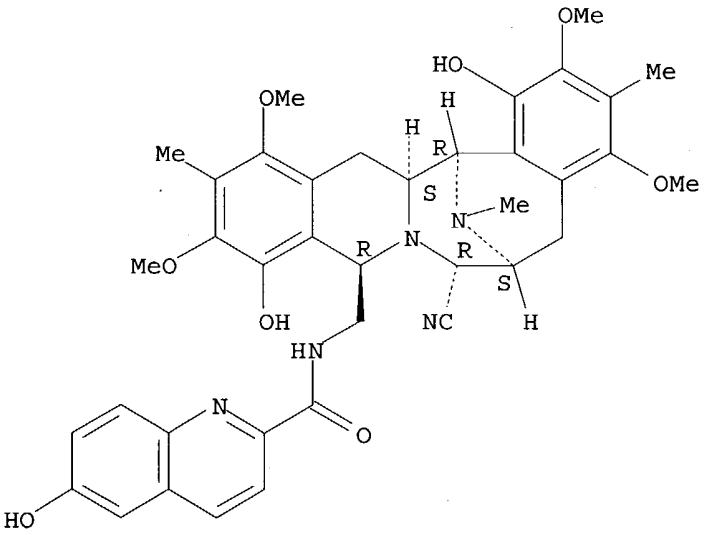
CN 2-Quinolinecarboxamide, N-[[(6S,7R,9R,14aS,15R)-7-cyano-6,7,9,14,14a,15-hexahydro-1,10-dihydroxy-2,4,11,13-tetramethoxy-3,12,16-trimethyl-6,15-imino-5H-isoquino[3,2-b][3]benzazocin-9-yl]methyl]-4-methyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



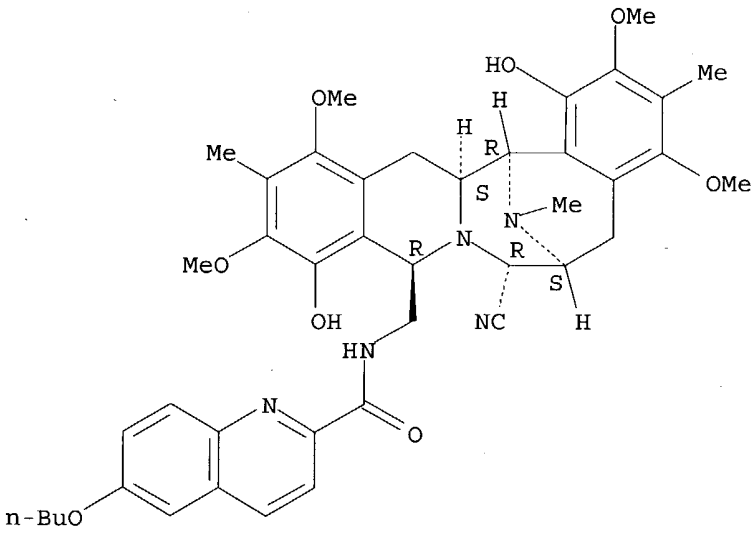
RN 349103-90-8 CAPLUS
CN 2-Quinolinecarboxamide, N-[[(6S,7R,9R,14aS,15R)-7-cyano-6,7,9,14,14a,15-hexahydro-1,10-dihydroxy-2,4,11,13-tetramethoxy-3,12,16-trimethyl-6,15-imino-5H-isoquino[3,2-b][3]benzazocin-9-yl]methyl]-6-hydroxy- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



RN 349103-91-9 CAPLUS
CN 2-Quinolinecarboxamide, 6-butoxy-N-[[(6S,7R,9R,14aS,15R)-7-cyano-6,7,9,14,14a,15-hexahydro-1,10-dihydroxy-2,4,11,13-tetramethoxy-3,12,16-trimethyl-6,15-imino-5H-isoquino[3,2-b][3]benzazocin-9-yl]methyl]- (9CI) (CA INDEX NAME)

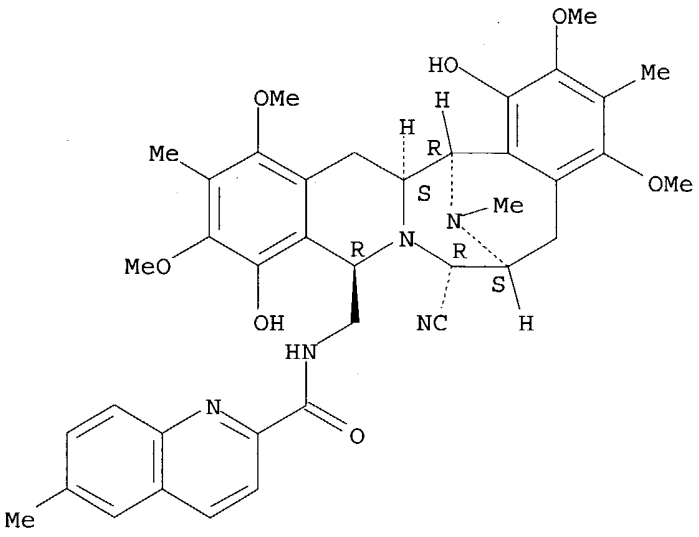
Absolute stereochemistry.



RN 349103-92-0 CAPLUS

CN 2-Quinolinecarboxamide, N-[[(6S,7R,9R,14aS,15R)-7-cyano-6,7,9,14,14a,15-hexahydro-1,10-dihydroxy-2,4,11,13-tetramethoxy-3,12,16-trimethyl-6,15-imino-5H-isoquino[3,2-b][3]benzazocin-9-yl]methyl]-6-methyl- (9CI) (CA INDEX NAME)

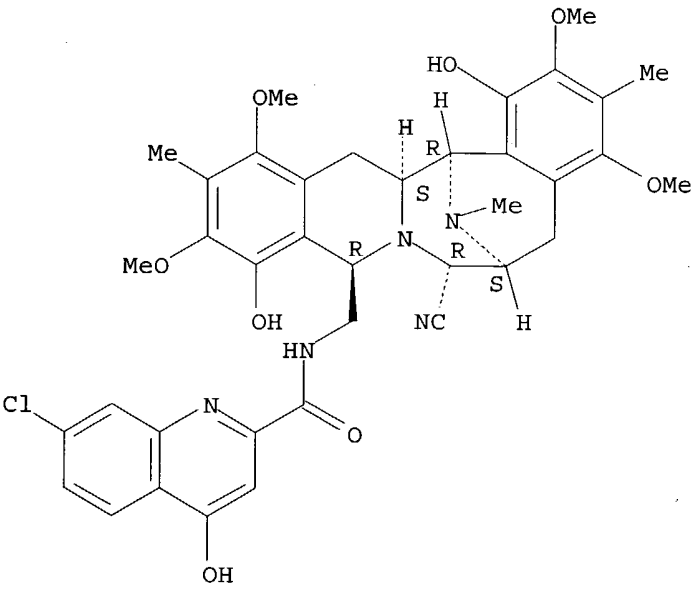
Absolute stereochemistry.



RN 349103-93-1 CAPLUS

CN 2-Quinolinecarboxamide, 7-chloro-N-[[(6S,7R,9R,14aS,15R)-7-cyano-6,7,9,14,14a,15-hexahydro-1,10-dihydroxy-2,4,11,13-tetramethoxy-3,12,16-trimethyl-6,15-imino-5H-isoquino[3,2-b][3]benzazocin-9-yl]methyl]-4-hydroxy- (9CI) (CA INDEX NAME)

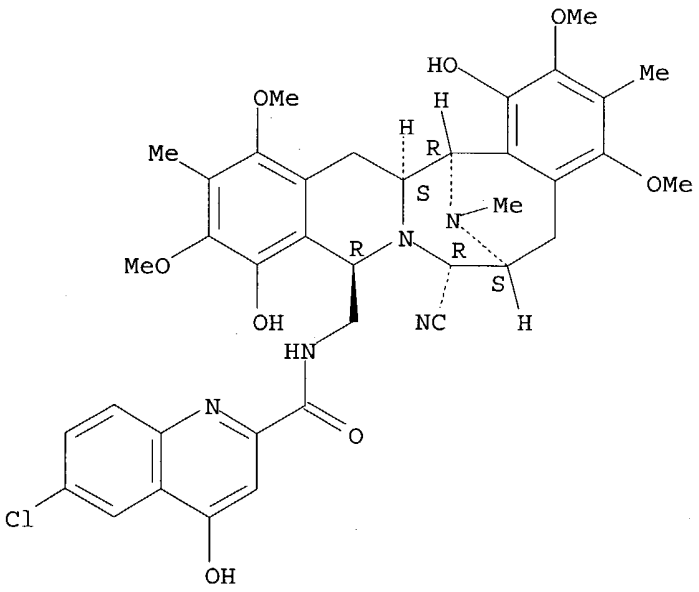
Absolute stereochemistry.



RN 349103-94-2 CAPLUS

CN 2-Quinolinecarboxamide, 6-chloro-N-[[(6S,7R,9R,14aS,15R)-7-cyano-6,7,9,14,14a,15-hexahydro-1,10-dihydroxy-2,4,11,13-tetramethoxy-3,12,16-trimethyl-6,15-imino-5H-isoquino[3,2-b][3]benzazocin-9-yl]methyl]-4-hydroxy- (9CI) (CA INDEX NAME)

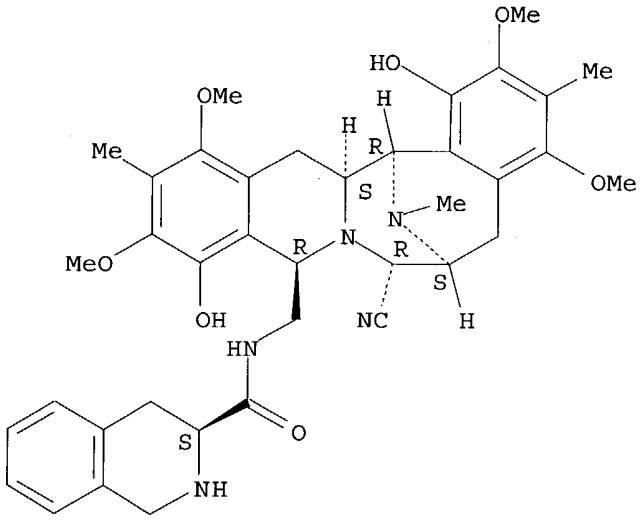
Absolute stereochemistry.



RN 349103-95-3 CAPLUS

CN 3-Isoquinolinecarboxamide, N-[[(6S,7R,9R,14aS,15R)-7-cyano-6,7,9,14,14a,15-hexahydro-1,10-dihydroxy-2,4,11,13-tetramethoxy-3,12,16-trimethyl-6,15-imino-5H-isoquino[3,2-b][3]benzazocin-9-yl]methyl]-1,2,3,4-tetrahydro-, (3S)- (9CI) (CA INDEX NAME)

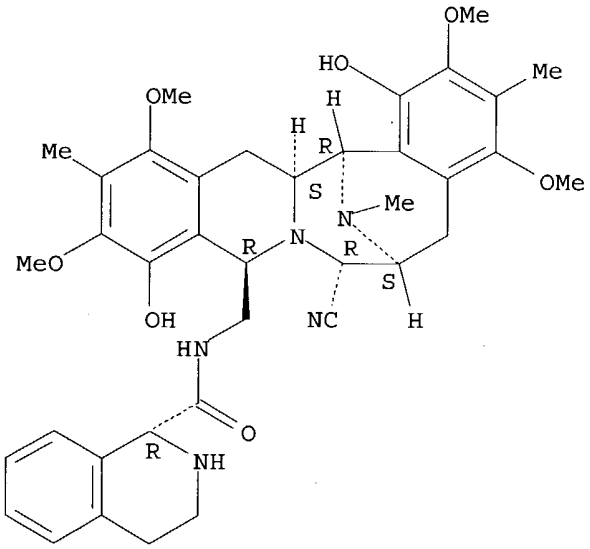
Absolute stereochemistry.



RN 349103-96-4 CAPLUS

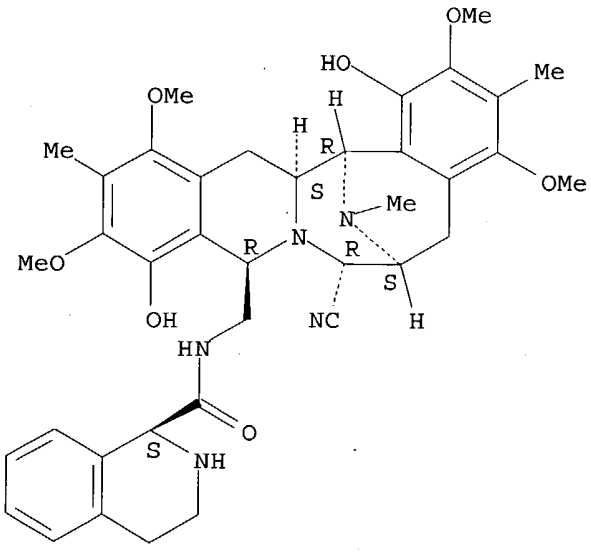
CN 1-Isoquinolinecarboxamide, N-[[(6S,7R,9R,14aS,15R)-7-cyano-6,7,9,14,14a,15-hexahydro-1,10-dihydroxy-2,4,11,13-tetramethoxy-3,12,16-trimethyl-6,15-imino-5H-isoquino[3,2-b][3]benzazocin-9-yl]methyl]-1,2,3,4-tetrahydro-, (1R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



RN 349103-97-5 CAPLUS
CN 1-Isoquinolinecarboxamide, N-[[(6S,7R,9R,14aS,15R)-7-cyano-6,7,9,14,14a,15-hexahydro-1,10-dihydroxy-2,4,11,13-tetramethoxy-3,12,16-trimethyl-6,15-imino-5H-isoquino[3,2-b][3]benzazocin-9-yl]methyl]-1,2,3,4-tetrahydro-, (1S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



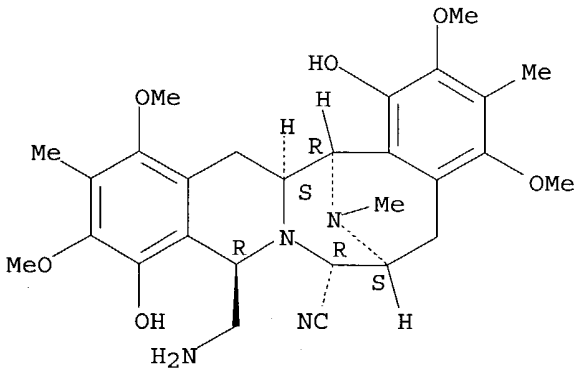
IT **349103-35-1**

RL: RCT (Reactant); RACT (Reactant or reagent)
(synthesis and antiproliferative activity of bishydroquinone derivs. of saframycin A)

RN 349103-35-1 CAPLUS

CN 6,15-Imino-5H-isoquino[3,2-b][3]benzazocine-7-carbonitrile, 9-(aminomethyl)-6,7,9,14,14a,15-hexahydro-1,10-dihydroxy-2,4,11,13-tetramethoxy-3,12,16-trimethyl-, (6S,7R,9R,14aS,15R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



RE.CNT 28 THERE ARE 28 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

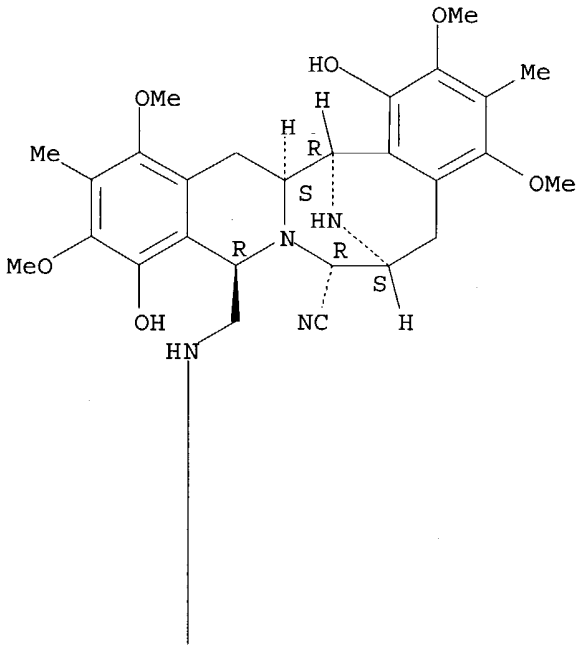
L4 ANSWER 6 OF 22 CAPLUS COPYRIGHT 2004 ACS on STN
AN 2000:577750 CAPLUS
DN 133:322029
TI One-Step Construction of the Pentacyclic Skeleton of Saframycin A from a "Trimer" of α-Amino Aldehydes
AU Myers, Andrew G.; Kung, Daniel W.
CS Department of Chemistry and Chemical Biology, Harvard University, Cambridge, MA, 02138, USA
SO Organic Letters (2000), 2(19), 3019-3022
CODEN: ORLEF7; ISSN: 1523-7060
PB American Chemical Society
DT Journal
LA English
OS CASREACT 133:322029
GI

* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *

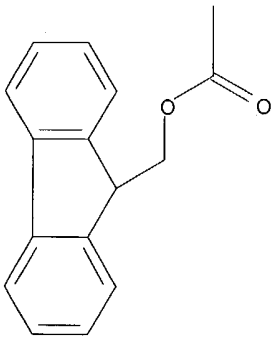
AB The entire skeleton of the saframycin antitumor antibiotics is assembled in one remarkable transformation (I) to (II) from an N-linked oligomer of three α-amino aldehyde components, a reaction pathway that may parallel the biosynthetic route to the saframycins.
IT **302585-91-7P**
RL: SPN (Synthetic preparation); PREP (Preparation)
(one-step construction of the pentacyclic skeleton of saframycin A from α-amino aldehydes)
RN 302585-91-7 CAPLUS
CN Carbamic acid, [[(6S,7R,9R,14aS,15R)-7-cyano-6,7,9,14,14a,15-hexahydro-1,10-dihydroxy-2,4,11,13-tetramethoxy-3,12-dimethyl-6,15-imino-5H-isoquino[3,2-b][3]benzazocin-9-yl]methyl]-, 9H-fluoren-9-ylmethyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A



PAGE 2-A



RE.CNT 17 THERE ARE 17 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 7 OF 22 CAPLUS COPYRIGHT 2004 ACS on STN
AN 2000:248566 CAPLUS
DN 133:30850
TI A novel face specific Mannich closure providing access to the saframycin-ecteinascidin series of piperazine based alkaloids
AU Zhou, Bishan; Guo, Jinsong; Danishefsky, Samuel J.
CS The Department of Chemistry, Columbia University, New York, NY, 10027, USA
SO Tetrahedron Letters (2000), 41(13), 2043-2046
CODEN: TELEAY; ISSN: 0040-4039
PB Elsevier Science Ltd.
DT Journal
LA English
OS CASREACT 133:30850
GI

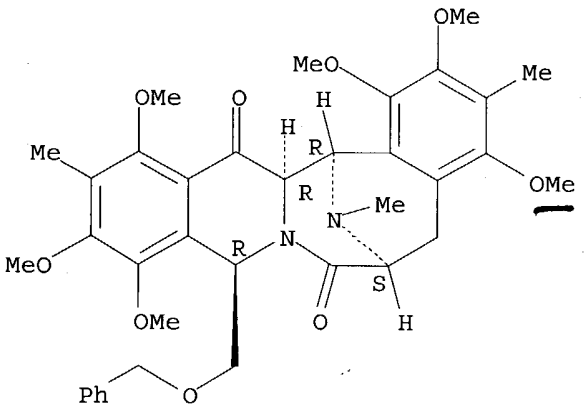
* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *

AB The Mannich-like closure of I to II directly provides the backbone stereochem. required for the titled alkaloids, in contrast to the stereochem. outcome in a related earlier case.

IT **271578-62-2P**
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(face specific Mannich closure providing access to saframycin-ecteinascidin series of piperazine based alkaloids)

RN 271578-62-2 CAPLUS
CN 6,15-Imino-5H-isoquino[3,2-b][3]benzazocine-7,14(6H,9H)-dione, 14a,15-dihydro-1,2,4,10,11,13-hexamethoxy-3,12,16-trimethyl-9-[(phenylmethoxy)methyl]-, (6S,9R,14aR,15R)- (9CI) (CA INDEX NAME)

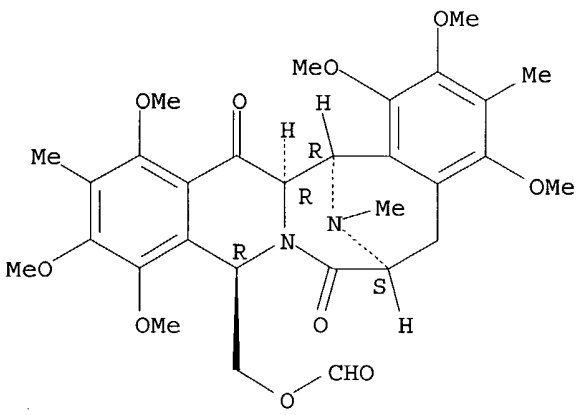
Absolute stereochemistry.



IT **273720-76-6P**
RL: SPN (Synthetic preparation); PREP (Preparation)
(face specific Mannich closure providing access to saframycin-ecteinascidin series of piperazine based alkaloids)

RN 273720-76-6 CAPLUS
CN 6,15-Imino-5H-isoquino[3,2-b][3]benzazocine-7,14(6H,9H)-dione, 9-[(formyloxy)methyl]-14a,15-dihydro-1,2,4,10,11,13-hexamethoxy-3,12,16-trimethyl-, (6S,9R,14aR,15R)- (9CI) (CA INDEX NAME)

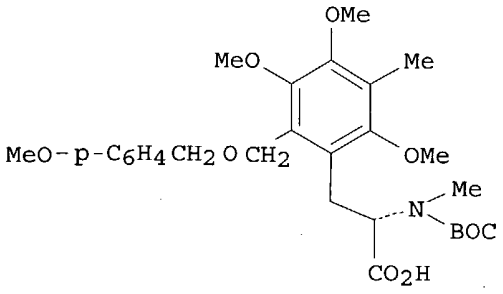
Absolute stereochemistry.



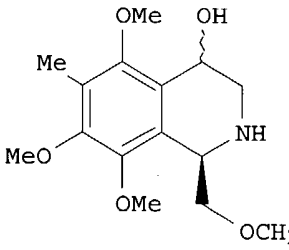
RE.CNT 9 THERE ARE 9 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 8 OF 22 CAPLUS COPYRIGHT 2004 ACS on STN
AN 2000:248565 CAPLUS
DN 133:4840
TI Synthetic explorations in the saframycin-ecteinascidin series: construction of major chiral subunits through catalytic asymmetric induction
AU Zhou, Bishan; Edmondson, Scott; Padron, Juan; Danishefsky, Samuel J.
CS The Department of Chemistry, Columbia University, New York, NY, 10027, USA
SO Tetrahedron Letters (2000), 41(13), 2039-2042
CODEN: TELEAY; ISSN: 0040-4039
PB Elsevier Science Ltd.
DT Journal
LA English
OS CASREACT 133:4840
GI

Same as in ANS. 7



I



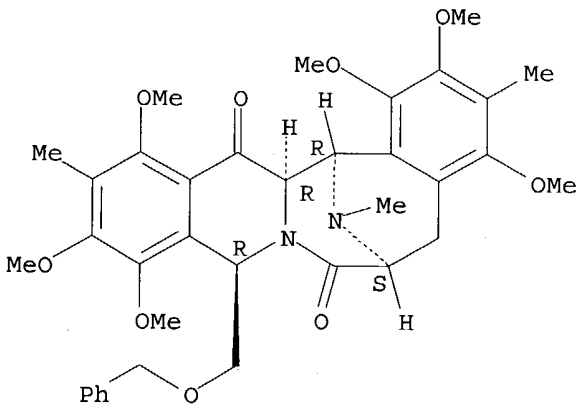
II

AB The major subunits (I and II) needed to reach the titled targets have been assembled by chemical, which included p-Claisen rearrangement, asym. epoxidn. and asym. dihydroxylation.

IT **271578-62-2P**
RL: PNU (Preparation, unclassified); PREP (Preparation)
(construction of major chiral saframycin subunits via catalytic asym. induction)

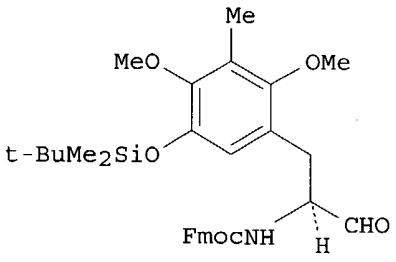
RN 271578-62-2 CAPLUS
CN 6,15-Imino-5H-isoquino[3,2-b][3]benzazocine-7,14(6H,9H)-dione, 14a,15-dihydro-1,2,4,10,11,13-hexamethoxy-3,12,16-trimethyl-9-[(phenylmethoxy)methyl]-, (6S,9R,14aR,15R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

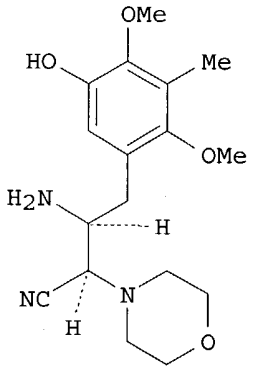


RE.CNT 17 THERE ARE 17 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 9 OF 22 CAPLUS COPYRIGHT 2004 ACS on STN
AN 1999:705507 CAPLUS
DN 132:64439
TI A Concise, Stereocontrolled Synthesis of (-)-Saframycin A by the Directed Condensation of α-Amino Aldehyde Precursors
AU Myers, Andrew G.; Kung, Daniel W.
CS Department of Chemistry and Chemical Biology, Harvard University, Cambridge, MA, 02138, USA
SO Journal of the American Chemical Society (1999), 121(46), 10828-10829
CODEN: JACSAT; ISSN: 0002-7863
PB American Chemical Society
DT Journal
LA English
OS CASREACT 132:64439
GI



I

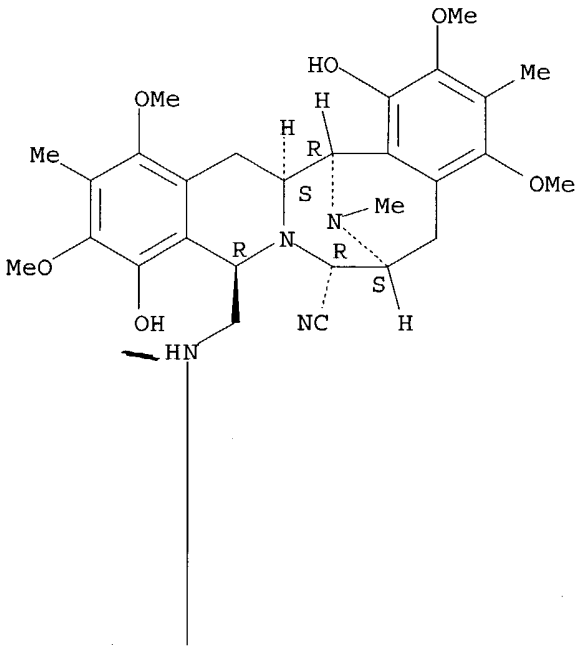


II

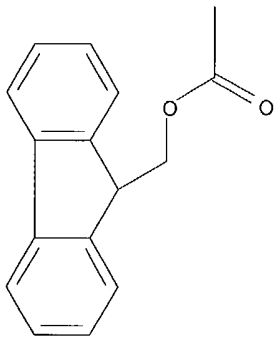
AB (-)-Saframycin A was prepared in 15% overall yield in 8 steps from the α-amino aldehyde precursors I and II.
IT **253329-76-9P 253329-80-5P**
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(stereocontrolled synthesis of (-)-saframycin A by directed condensation of α-amino aldehyde precursors)
RN 253329-76-9 CAPLUS
CN Carbamic acid, [[(6S,7R,9R,14aS,15R)-7-cyano-6,7,9,14,14a,15-hexahydro-1,10-dihydroxy-2,4,11,13-tetramethoxy-3,12,16-trimethyl-6,15-imino-5H-isoquino[3,2-b][3]benzazocin-9-yl]methyl]-, 9H-fluoren-9-ylmethyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A

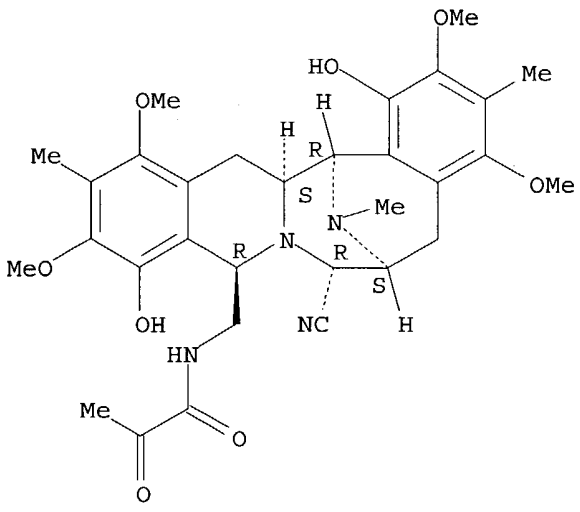


PAGE 2-A



RN 253329-80-5 CAPLUS
CN Propanamide, N-[[(6S,7R,9R,14aS,15R)-7-cyano-6,7,9,14,14a,15-hexahydro-1,10-dihydroxy-2,4,11,13-tetramethoxy-3,12,16-trimethyl-6,15-imino-5H-isoquino[3,2-b][3]benzazocin-9-yl]methyl]-2-oxo- (9CI) (CA INDEX NAME)

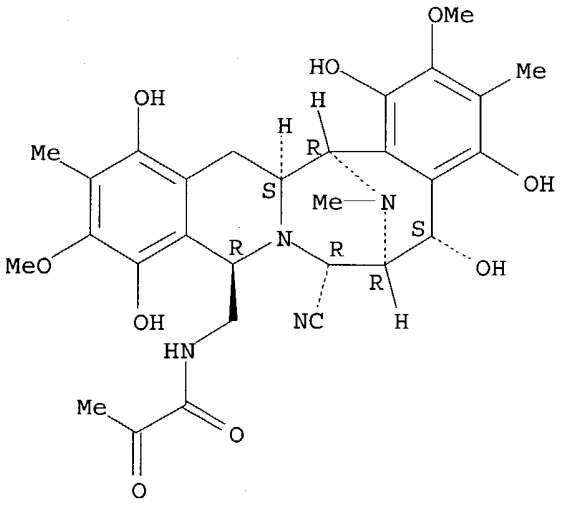
Absolute stereochemistry.



RE.CNT 11 THERE ARE 11 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

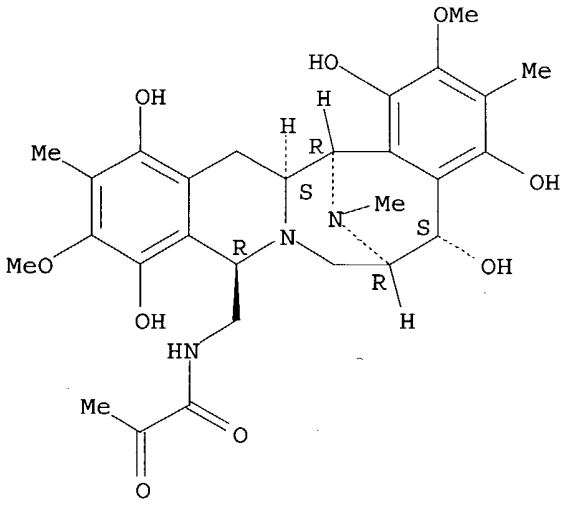
L4 ANSWER 10 OF 22 CAPLUS COPYRIGHT 2004 ACS on STN
AN 1995:741636 CAPLUS
DN 123:313604
TI Synthesis of saframycins. X. Transformation of (-)-saframycin A to (-)-saframycin Mx type compound with the structure proposed for saframycin E
AU Saito, Naoki; Harada, Shunji; Nishida, Masayo; Inouye, Izumi; Kubo, Akinori
CS Meiji College Pharmacy, Tokyo, 154, Japan
SO Chemical & Pharmaceutical Bulletin (1995), 43(5), 777-82
CODEN: CPBTAL; ISSN: 0009-2363
PB Pharmaceutical Society of Japan
DT Journal
LA English
AB Treatment of (-)-saframycin A with selenium oxide in acetic acid afforded (-)-saframycin G, and a catalytic reduction and regioselective oxidation sequence
afforded the saframycin Mx type compound We applied this methodol. to the transformation of (±)-5-hydroxysaframycin B to the hydroquinone saframycin E. Acetylation of saframycin E with acetic anhydride in pyridine gave the triacetate, which is identical with the triacetyl derivative of natural saframycin E.
IT **160952-79-4P 169616-80-2P**
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(transformation of saframycin A to saframycin Mx type compound and total synthesis of saframycin E)
RN 160952-79-4 CAPLUS
CN Propanamide, N-[(7-cyano-6,7,9,14,14a,15-hexahydro-1,4,5,10,13-pentahydroxy-2,11-dimethoxy-3,12,16-trimethyl-6,15-imino-5H-isoquino[3,2-b][3]benzazocin-9-yl)methyl]-2-oxo-, [5S-(5α,6α,7α,9.beta.,14aα,15α)]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



RN 169616-80-2 CAPLUS
CN Propanamide, N-[(6,7,9,14,14a,15-hexahydro-1,4,5,10,13-pentahydroxy-2,11-dimethoxy-3,12,16-trimethyl-6,15-imino-5H-isoquino[3,2-b][3]benzazocin-9-yl)methyl]-2-oxo-, (5α,6α,9β,14aα,15α)- (9CI)
(CA INDEX NAME)

Relative stereochemistry.



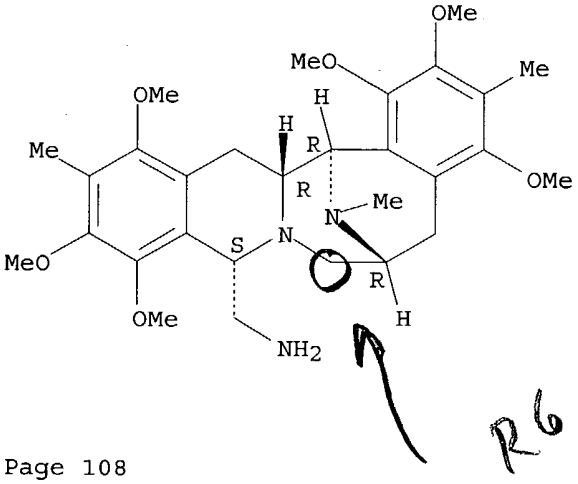
L4 ANSWER 11 OF 22 CAPLUS COPYRIGHT 2004 ACS on STN
AN 1995:717840 CAPLUS
DN 123:227862
TI Synthesis of saframycins. XII. Total synthesis of (-)-N-acetylsaframycin Mx 2 and its epi-(+)-enantiomer
AU Saito, Naoki; Harada, Shunji; Inouye, Izumi; Yamaguchi, Kentaro; Kubo, Akinori
CS Meiji Coll. Pharmacy, Tokyo, 154, Japan
SO Tetrahedron (1995), 51(30), 8231-46
CODEN: TETRAB; ISSN: 0040-4020
PB Pergamon
DT Journal
LA English
GI

* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *

AB The first total synthesis of (-)-N-acetylsaframycin Mx 2 I from (±)-pentacyclic amine II is described. The reaction of II with Cbz-L-alanine gave an inseparable mixture of amides III and IV (R = CO2CH2Ph). Deprotection of the Cbz group to amines followed by treatment with acetic anhydride in pyridine produced amides III and IV (R = Ac) (V). The structure of V was determined by X-ray crystallog. The conversion of III (R = Ac) to a bisquinone and subsequent stereoselective and regioselective introduction of the methoxyl group at position 5 provided VI. Finally, VI was subjected to catalytic reduction and regioselective oxidation to give I. On the other hand, the epi-enantiomer V was transformed to epi-(+)-I in a same four-step sequence. The specific optical rotation and the CD spectra of I and its epimer were of opposite sign. The assignment of the absolute configuration of saframycins Mx as 5S,6R,9R,14aS,15R,19S is also discussed.

IT **112995-89-8**
RL: RCT (Reactant); RACT (Reactant or reagent)
(total synthesis of saframycin Mx 2 and epimer)
RN 112995-89-8 CAPLUS
CN 6,15-Imino-5H-isoquino[3,2-b][3]benzazocine-9-methanamine, 6,7,9,14,14a,15-hexahydro-1,2,4,10,11,13-hexamethoxy-3,12,16-trimethyl-, (6α,9β,14aα,15β)- (9CI) (CA INDEX NAME)

Relative stereochemistry.



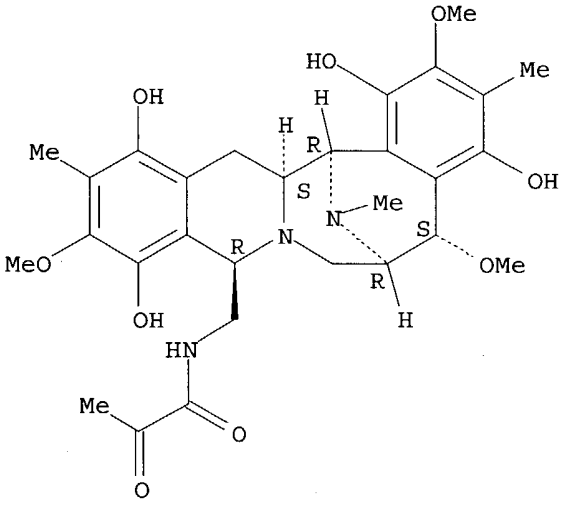
R6 * 14

IT **168415-83-6P 168415-87-0P 168415-89-2P**
168415-91-6P 168415-97-2P 168609-86-7P
168609-88-9P 168609-90-3P 168609-94-7P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(total synthesis of saframycin Mx 2 and epimer)

RN 168415-83-6 CAPLUS

CN Propanamide, N-[(6,7,9,14,14a,15-hexahydro-1,4,10,13-tetrahydroxy-2,5,11-trimethoxy-3,12,16-trimethyl-6,15-imino-5H-isoquino[3,2-b][3]benzazocin-9-yl)methyl]-2-oxo-, (5α,6α,9β,14aα,15α)- (9CI) (CA INDEX NAME)

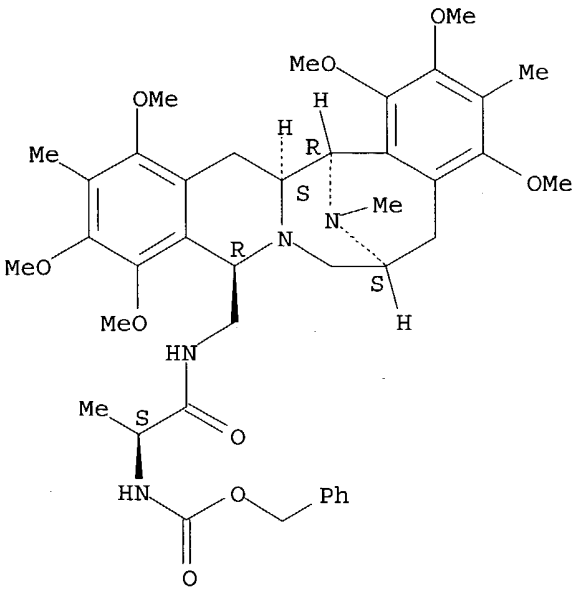
Relative stereochemistry.



RN 168415-87-0 CAPLUS

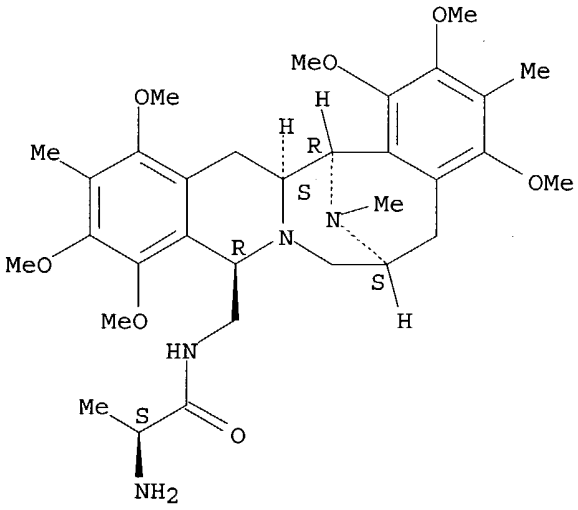
CN Carbamic acid, [2-[[(6,7,9,14,14a,15-hexahydro-1,2,4,10,11,13-hexamethoxy-3,12,16-trimethyl-6,15-imino-5H-isoquino[3,2-b][3]benzazocin-9-yl)methyl]amino]-1-methyl-2-oxoethyl]-, phenylmethyl ester, [6S-[6α,9β(R*),14aα,15α]]- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).



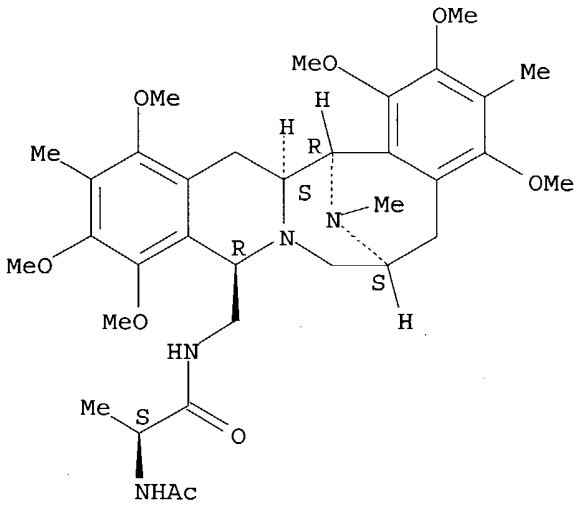
RN 168415-89-2 CAPLUS
CN Propanamide, 2-amino-N-[(6,7,9,14,14a,15-hexahydro-1,2,4,10,11,13-hexamethoxy-3,12,16-trimethyl-6,15-imino-5H-isoquino[3,2-b][3]benzazocin-9-yl)methyl]-, [6S-[6α,9β(R*),14aα,15α]]- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).



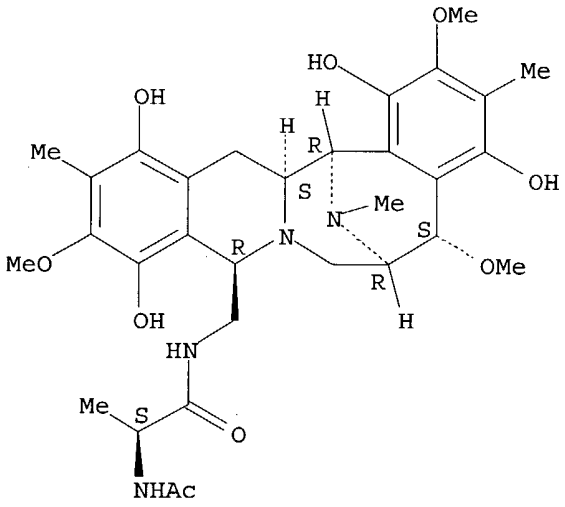
RN 168415-91-6 CAPLUS
CN Propanamide, 2-(acetylamino)-N-[(6,7,9,14,14a,15-hexahydro-1,2,4,10,11,13-hexamethoxy-3,12,16-trimethyl-6,15-imino-5H-isoquino[3,2-b][3]benzazocin-9-yl)methyl]-, [6S-[6α,9β(R*),14aα,15α]]- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).



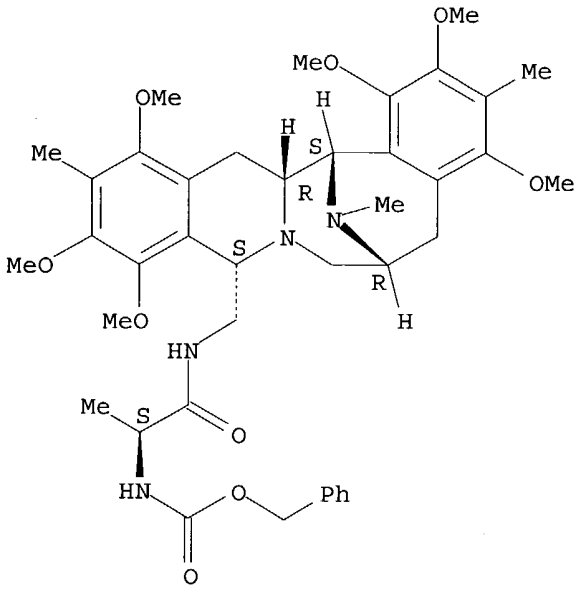
RN 168415-97-2 CAPLUS
CN Propanamide, 2-(acetylamino)-N-[(6,7,9,14,14a,15-hexahydro-1,4,10,13-tetrahydroxy-2,5,11-trimethoxy-3,12,16-trimethyl-6,15-imino-5H-isoquino[3,2-b][3]benzazocin-9-yl)methyl]-, [5S-[5α,6α,9β(R*),14aα,15α]]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



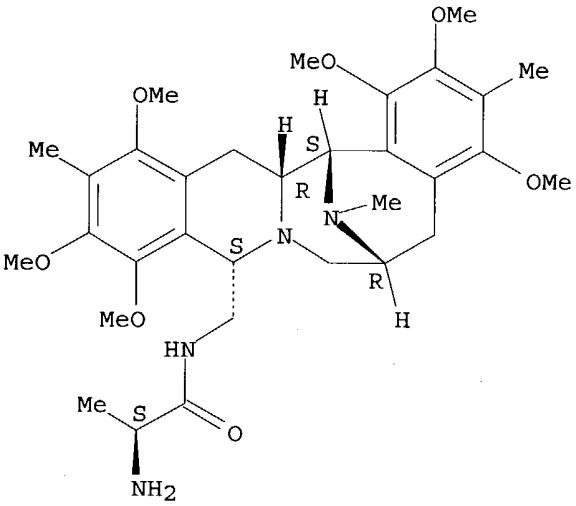
RN 168609-86-7 CAPLUS
CN Carbamic acid, [2-[[(6,7,9,14,14a,15-hexahydro-1,2,4,10,11,13-hexamethoxy-3,12,16-trimethyl-6,15-imino-5H-isoquino[3,2-b][3]benzazocin-9-yl)methyl]amino]-1-methyl-2-oxoethyl]-, phenylmethyl ester, [6R-[6α,9β(S*),14aα,15α]]- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).



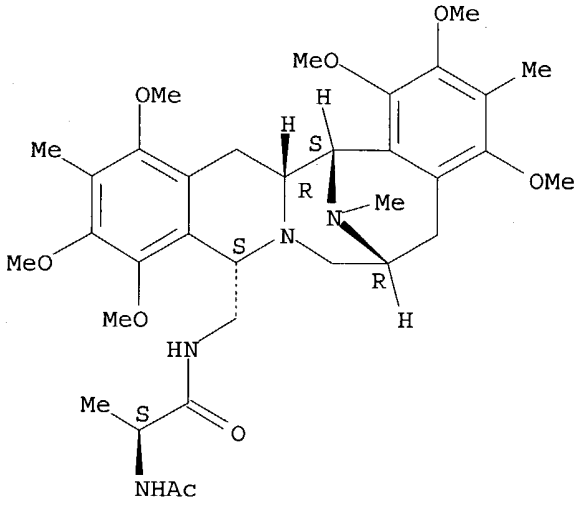
RN 168609-88-9 CAPLUS
CN Propanamide, 2-amino-N-[(6,7,9,14,14a,15-hexahydro-1,2,4,10,11,13-hexamethoxy-3,12,16-trimethyl-6,15-imino-5H-isoquino[3,2-b][3]benzazocin-9-yl)methyl]-, [6R-[6α,9β(S*),14aα,15α]]- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).



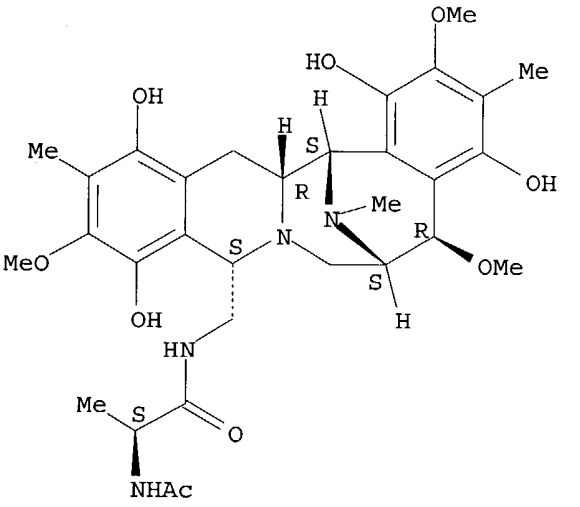
RN 168609-90-3 CAPLUS
CN Propanamide, 2-(acetylamino)-N-[(6,7,9,14,14a,15-hexahydro-1,2,4,10,11,13-hexamethoxy-3,12,16-trimethyl-6,15-imino-5H-isoquino[3,2-b][3]benzazocin-9-yl)methyl]-, [6R-[6α,9β(S*),14aα,15α]]- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).

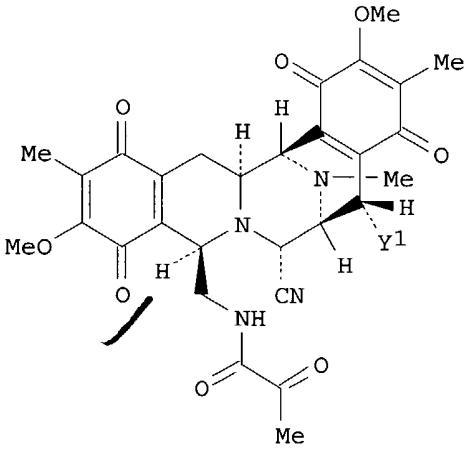


RN 168609-94-7 CAPLUS
CN Propanamide, 2-(acetylamino)-N-[(6,7,9,14,14a,15-hexahydro-1,4,10,13-tetrahydroxy-2,5,11-trimethoxy-3,12,16-trimethyl-6,15-imino-5H-isoquino[3,2-b][3]benzazocin-9-yl)methyl]-, [5R-[5α,6α,9β(S*),14aα,15α]]- (9CI) (CA INDEX NAME)

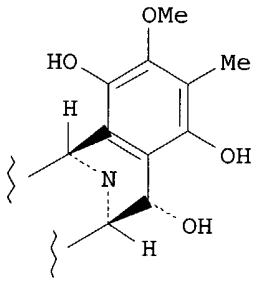
Absolute stereochemistry.



L4 ANSWER 12 OF 22 CAPLUS COPYRIGHT 2004 ACS on STN
AN 1995:318223 CAPLUS
DN 122:132813
TI Synthesis of saframycins. VI. The useful transformation of (-)-saframycin A to (-)-saframycin Mx type compound
AU Saito, Naoki; Nishida, Masayo; Kubo, Akinori
CS Meiji Coll. Pharm., Tokyo, 154, Japan
SO Chemical & Pharmaceutical Bulletin (1991), 39(5), 1343-5
CODEN: CPBTAL; ISSN: 0009-2363
PB Pharmaceutical Society of Japan
DT Journal
LA English
GI



I

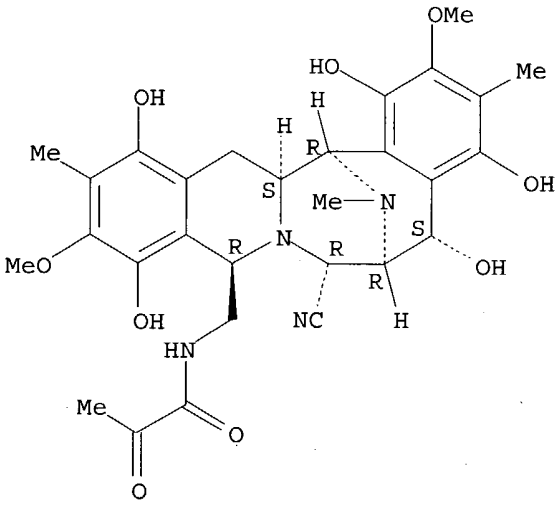


III

AB A transformation of (-)-saframycin A I (Y1 = H) (II) to the saframycin Mx type compound III is described. Treating II with selenium oxide in acetic acid afforded (-)-saframycin G I (Y1 = OH), followed by catalytic reduction and regioselective oxidation to provide the hydroquinone III.

IT **160952-79-4P**
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(transformation of saframycin A to Mx type compound)
RN 160952-79-4 CAPLUS
CN Propanamide, N-[(7-cyano-6,7,9,14,14a,15-hexahydro-1,4,5,10,13-pentahydroxy-2,11-dimethoxy-3,12,16-trimethyl-6,15-imino-5H-isoquino[3,2-b][3]benzazocin-9-yl)methyl]-2-oxo-, [5S-(5α,6α,7α,9.beta.,14aα,15α)]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.


OMe
HO
Me
OH
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S
Me
N
S
MeO
R
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R
OH
R
OH
NC
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HN
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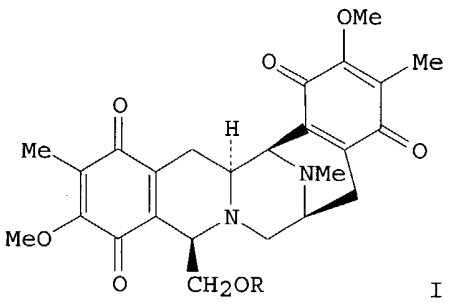
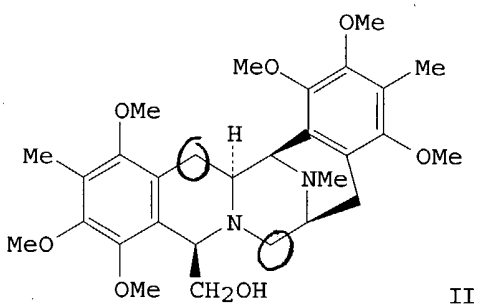
O

L4 ANSWER 13 OF 22 CAPLUS COPYRIGHT 2004 ACS on STN
AN 1991:608305 CAPLUS
DN 115:208305
TI Synthesis of saframycins. VII. The synthesis of novel renieramycin congeners
AU Saito, Naoki; Yamauchi, Reiko; Kubo, Akinori
CS Meiji Coll. Pharm., Tokyo, 154, Japan
SO Heterocycles (1991), 32(6), 1203-14
CODEN: HTCYAM; ISSN: 0385-5414
DT Journal
LA English
OS CASREACT 115:208305
GI



I



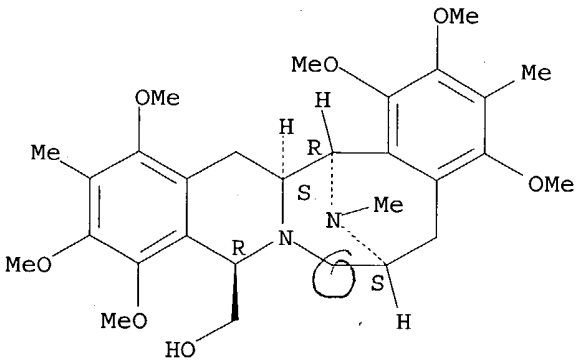
II

AB The marine alkaloid renieramycin congeners I (R = H, Ac, EtCO) were synthesized starting from the alc. II which was the key intermediate for saframycin B synthesis.

IT **112446-04-5**
RL: RCT (Reactant); RACT (Reactant or reagent)
(acylation of)

RN 112446-04-5 CAPLUS
CN 6,15-Imino-5H-isoquino[3,2-b][3]benzazocine-9-methanol, 6,7,9,14,14a,15-hexahydro-1,2,4,10,11,13-hexamethoxy-3,12,16-trimethyl-, (6α,9β,14aα,15α)- (9CI) (CA INDEX NAME)

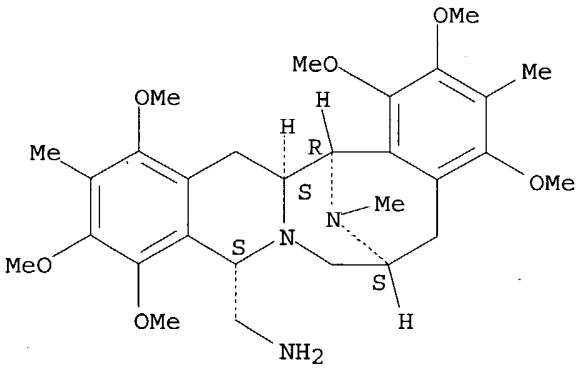
Relative stereochemistry.



IT **113083-38-8P**
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

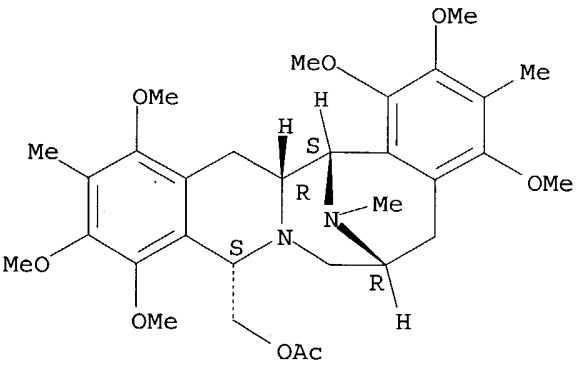
(preparation and acylation of, with pyruvoyl chloride)
RN 113083-38-8 CAPLUS
CN 6,15-Imino-5H-isoquino[3,2-b][3]benzazocine-9-methanamine, 6,7,9,14,14a,15-hexahydro-1,2,4,10,11,13-hexamethoxy-3,12,16-trimethyl-, (6α,9α,14aα,15α)- (9CI) (CA INDEX NAME)

Relative stereochemistry.



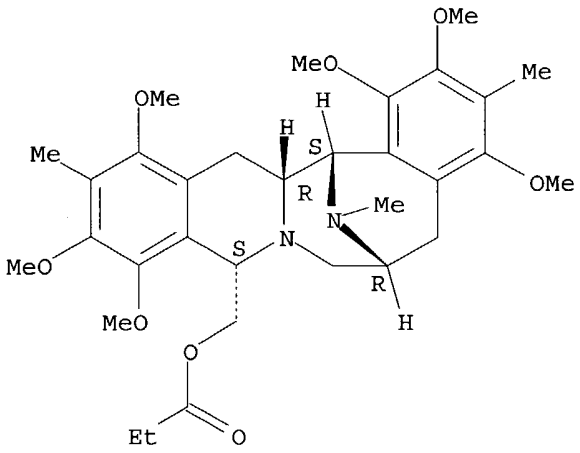
IT **112995-91-2P 136581-76-5P**
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(preparation and demethylation of)
RN 112995-91-2 CAPLUS
CN 6,15-Imino-5H-isoquino[3,2-b][3]benzazocine-9-methanol, 6,7,9,14,14a,15-hexahydro-1,2,4,10,11,13-hexamethoxy-3,12,16-trimethyl-, acetate (ester), (6α,9β,14aα,15α)- (9CI) (CA INDEX NAME)

Relative stereochemistry.



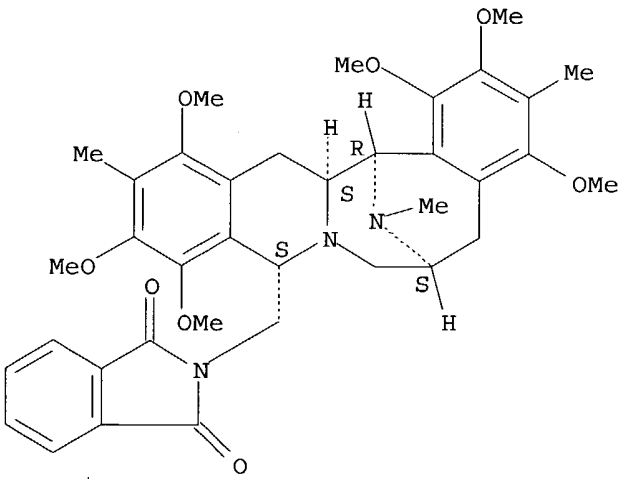
RN 136581-76-5 CAPLUS
CN 6,15-Imino-5H-isoquino[3,2-b][3]benzazocine-9-methanol, 6,7,9,14,14a,15-hexahydro-1,2,4,10,11,13-hexamethoxy-3,12,16-trimethyl-, propanoate (ester), (6α,9β,14aα,15α)- (9CI) (CA INDEX NAME)

Relative stereochemistry.



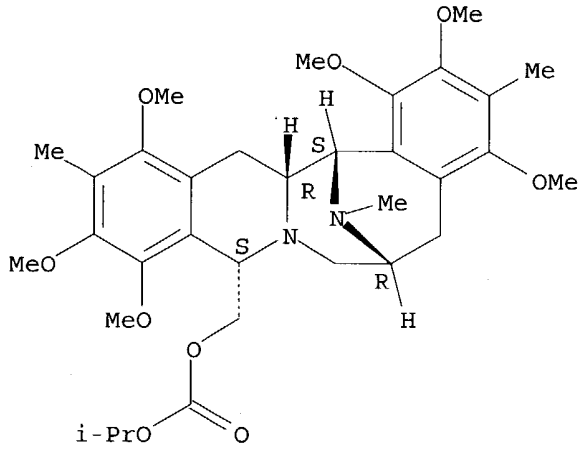
IT **112446-14-7P**
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(preparation and hydrazinolysis of)
RN 112446-14-7 CAPLUS
CN 1H-Isoindole-1,3(2H)-dione, 2-[(6,7,9,14,14a,15-hexahydro-1,2,4,10,11,13-hexamethoxy-3,12,16-trimethyl-6,15-imino-5H-isoquino[3,2-b][3]benzazocin-9-yl)methyl]-, (6α,9α,14aα,15α)- (9CI) (CA INDEX NAME)

Relative stereochemistry.



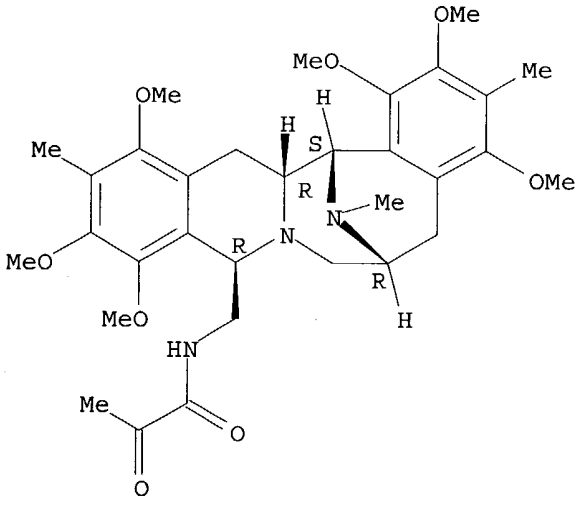
IT **136604-12-1P**
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(preparation and hydrolysis of)
RN 136604-12-1 CAPLUS
CN Carbonic acid, (6,7,9,14,14a,15-hexahydro-1,2,4,10,11,13-hexamethoxy-3,12,16-trimethyl-6,15-imino-5H-isoquino[3,2-b][3]benzazocin-9-yl)methyl 1-methylethyl ester, (6α,9β,14aα,15α)- (9CI) (CA INDEX NAME)

Relative stereochemistry.



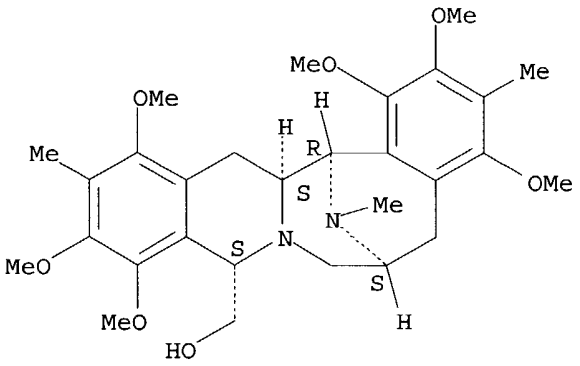
IT **112529-60-9P**
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(preparation and partial demethylation of)
RN 112529-60-9 CAPLUS
CN Propanamide, N-[(6,7,9,14,14a,15-hexahydro-1,2,4,10,11,13-hexamethoxy-3,12,16-trimethyl-6,15-imino-5H-isoquino[3,2-b][3]benzazocin-9-yl)methyl]-2-oxo-, (6α,9α,14aα,15α)- (9CI) (CA INDEX NAME)

Relative stereochemistry.



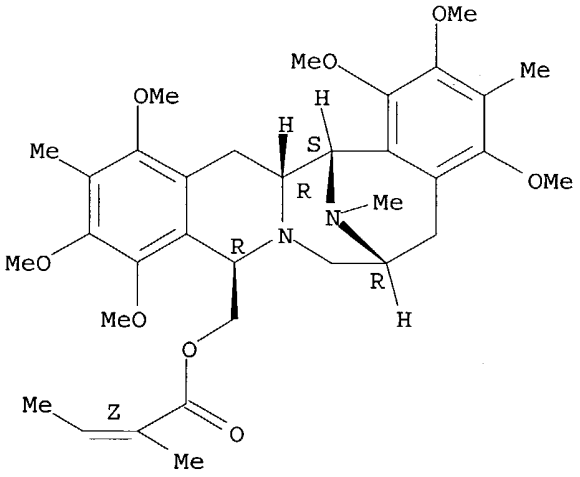
IT **112529-59-6P**
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(preparation and reaction of, with phthalimide)
RN 112529-59-6 CAPLUS
CN 6,15-Imino-5H-isoquino[3,2-b][3]benzazocine-9-methanol, 6,7,9,14,14a,15-hexahydro-1,2,4,10,11,13-hexamethoxy-3,12,16-trimethyl-, (6α,9α,14aα,15α)- (9CI) (CA INDEX NAME)

Relative stereochemistry.



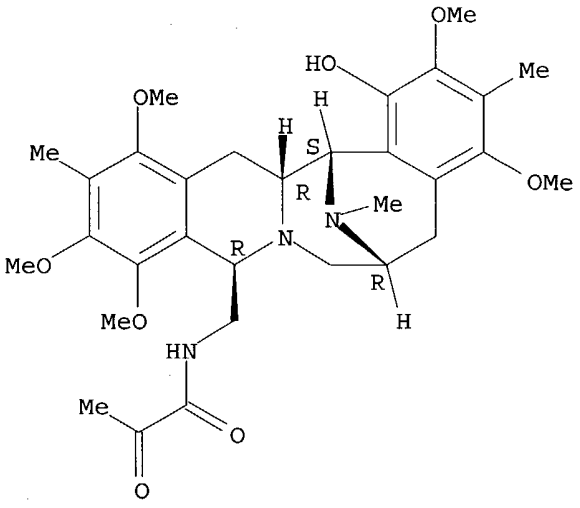
IT **136581-72-1P 136656-90-1P 136656-91-2P**
136656-92-3P 136656-93-4P
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation of)
RN 136581-72-1 CAPLUS
CN 2-Butenoic acid, 2-methyl-, (6,7,9,14,14a,15-hexahydro-1,2,4,10,11,13-hexamethoxy-3,12,16-trimethyl-6,15-imino-5H-isoquino[3,2-b][3]benzazocin-9-yl)methyl ester, [6α,9α(Z),14aα,15α]- (9CI) (CA INDEX NAME)

Relative stereochemistry.
Double bond geometry as shown.



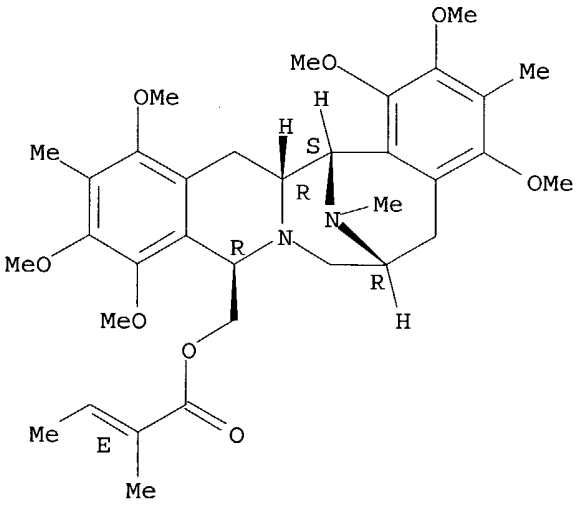
RN 136656-90-1 CAPLUS
CN Propanamide, N-[(6,7,9,14,14a,15-hexahydro-1-hydroxy-2,4,10,11,13-pentamethoxy-3,12,16-trimethyl-6,15-imino-5H-isoquino[3,2-b][3]benzazocin-9-yl)methyl]-2-oxo-, (6α,9α,14aα,15α)- (9CI) (CA INDEX NAME)

Relative stereochemistry.



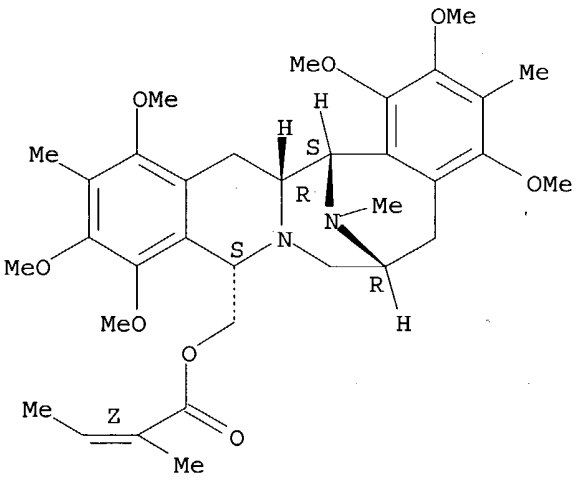
RN 136656-91-2 CAPLUS
CN 2-Butenoic acid, 2-methyl-, (6,7,9,14,14a,15-hexahydro-1,2,4,10,11,13-hexamethoxy-3,12,16-trimethyl-6,15-imino-5H-isoquino[3,2-b][3]benzazocin-9-yl)methyl ester, [6α,9α(E),14aα,15α]- (9CI) (CA INDEX NAME)

Relative stereochemistry.
Double bond geometry as shown.



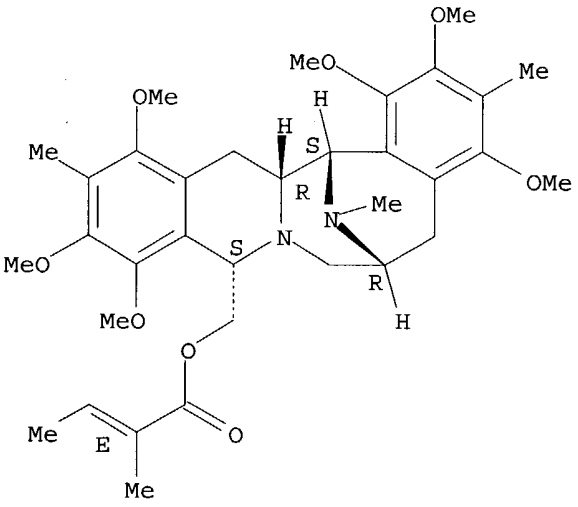
RN 136656-92-3 CAPLUS
CN 2-Butenoic acid, 2-methyl-, (6,7,9,14,14a,15-hexahydro-1,2,4,10,11,13-hexamethoxy-3,12,16-trimethyl-6,15-imino-5H-isoquino[3,2-b][3]benzazocin-9-yl)methyl ester, [6α,9β(Z),14aα,15α]- (9CI) (CA INDEX NAME)

Relative stereochemistry.
Double bond geometry as shown.



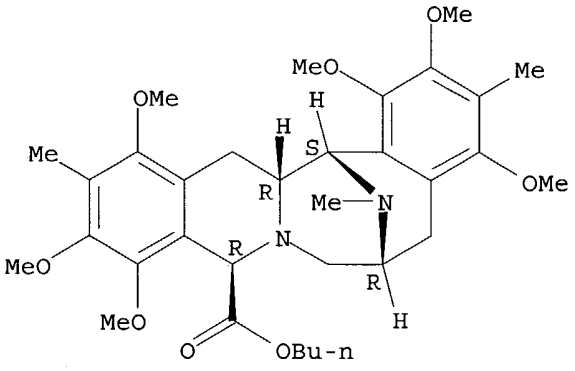
RN 136656-93-4 CAPLUS
CN 2-Butenoic acid, 2-methyl-, (6,7,9,14,14a,15-hexahydro-1,2,4,10,11,13-hexamethoxy-3,12,16-trimethyl-6,15-imino-5H-isoquino[3,2-b][3]benzazocin-9-yl)methyl ester, [6α,9β(E),14aα,15α]- (9CI) (CA INDEX NAME)

Relative stereochemistry.
Double bond geometry as shown.



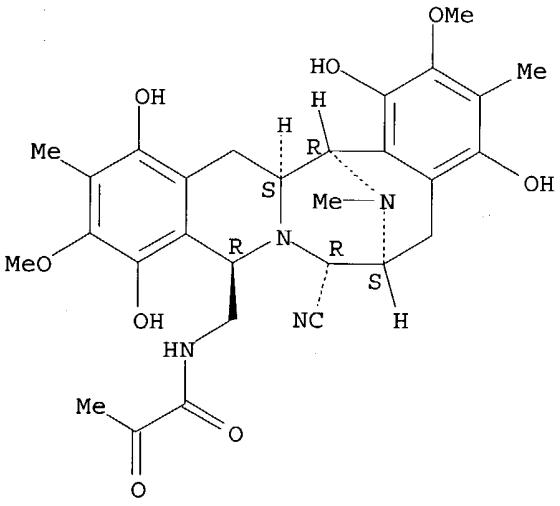
IT **112529-58-5**
RL: RCT (Reactant); RACT (Reactant or reagent)
(reduction of)
RN 112529-58-5 CAPLUS
CN 6,15-Imino-5H-isoquino[3,2-b][3]benzazocine-9-carboxylic acid, 6,7,9,14,14a,15-hexahydro-1,2,4,10,11,13-hexamethoxy-3,12,16-trimethyl-, butyl ester, (6α,9α,14aα,15α)- (9CI) (CA INDEX NAME)

Relative stereochemistry.

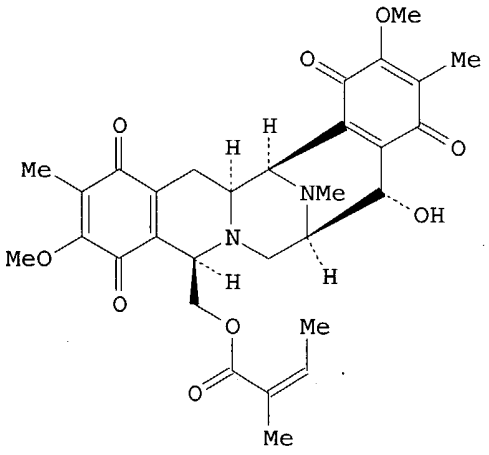

OMe
MeO
Me
OMe
H
H
S
Me
R
Me
N
OMe
R
N
MeO
R
H
MeO
O
OBu-n

L4 ANSWER 14 OF 22 CAPLUS COPYRIGHT 2004 ACS on STN
AN 1991:441435 CAPLUS
DN 115:41435
TI Computer simulation of the binding of saframycin A to d(GATGCATC)2
AU Hill, G. Craig; Remers, William A.
CS Coll. Pharm., Univ. Arizona, Tucson, AZ, 85271, USA
SO Journal of Medicinal Chemistry (1991), 34(7), 1990-8
CODEN: JMCMAR; ISSN: 0022-2623
DT Journal
LA English
AB The binding of saframycin A to the octanucleotide duplex d(GATGCATC)2 was investigated using mol. dynamics. For covalent binding at N2 of the central guanine, only the R configuration at the alkylating carbon (C7) was permitted for B DNA and the 3' direction in the minor groove was preferred by 11 kcal/mol. The dihydroquinone form of saframycin A gave stronger binding than the quinone, in agreement with the literature. Addition of solvent and counterions made no significant change in the geometry of the preferred model. The proposed mechanism of DNA alkylation, involving iminium ion intermediates from the dihydroquinone or quinone, was investigated by modeling these species. They gave models with good net binding enthalpies, and C7 was in close proximity to N2 of guanine. The noncovalent binding of saframycin A and its dihydroquinone in the vicinity og guanine also was favorable in the 3' direction.
IT **133966-18-4**
RL: BIOL (Biological study)
(binding of, to octanucleotide duplex, mol. modeling of)
RN 133966-18-4 CAPLUS
CN Propanamide, N-[(7-cyano-6,7,9,14,14a,15-hexahydro-1,4,10,13-tetrahydroxy-2,11-dimethoxy-3,12,16-trimethyl-6,15-imino-5H-isoquino[3,2-b][3]benzazocin-9-yl)methyl]-2-oxo-, [6S-(6α,7α,9β,14a.alpha.,15α)]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



L4 ANSWER 15 OF 22 CAPLUS COPYRIGHT 2004 ACS on STN
AN 1991:102523 CAPLUS
DN 114:102523
TI A stereocontrolled total synthesis of (±)-renieramycin A
AU Fukuyama, Tohru; Linton, Steven D.; Tun, Min Min
CS Dep. Chem., Rice Univ., Houston, TX, 77251, USA
SO Tetrahedron Letters (1990), 31(42), 5989-92
CODEN: TELEAY; ISSN: 0040-4039
DT Journal
LA English
GI

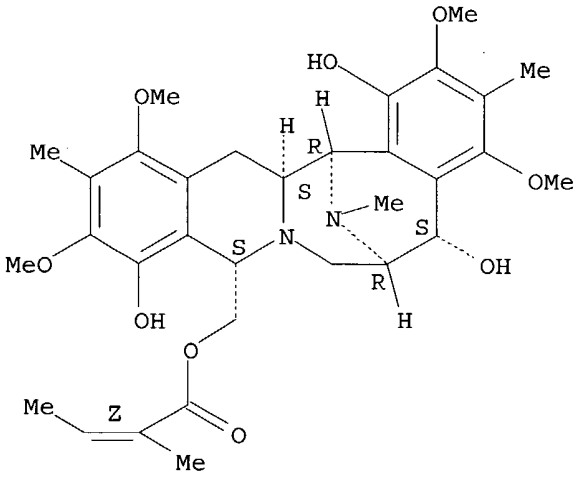


I

AB The first total synthesis of (±)-renieramycin A (I) is described. The stereochem. of the angelate side chain was unequivocally determined by X-ray crystallog. anal. of the penultimate intermediate.

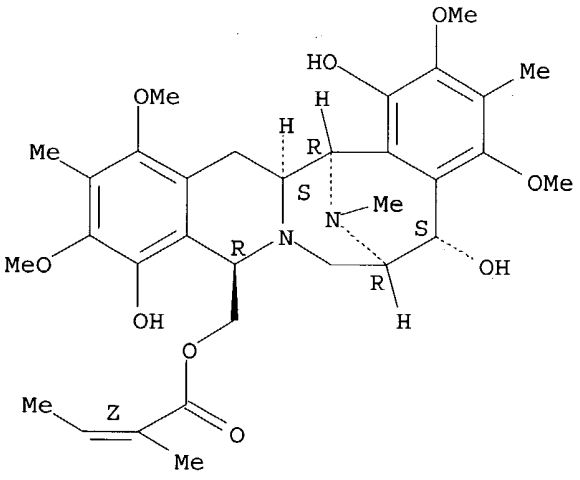
IT **132340-98-8P**
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation of)
RN 132340-98-8 CAPLUS
CN 2-Butenoic acid, 2-methyl-, (6,7,9,14,14a,15-hexahydro-1,5,10-trihydroxy-2,4,11,13-tetramethoxy-3,12,16-trimethyl-6,15-imino-5H-isoquino[3,2-b][3]benzazocin-9-yl)methyl ester, [5α,6α,9α(Z),14a.alph a.,15α]- (9CI) (CA INDEX NAME)

Relative stereochemistry.
Double bond geometry as shown.

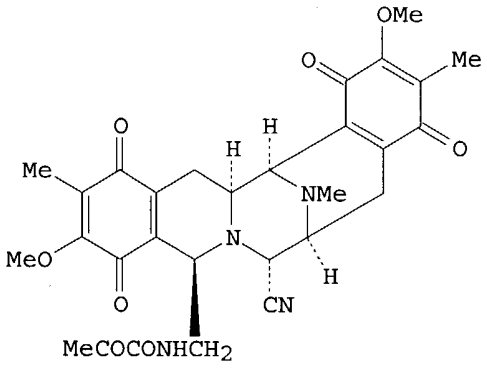


IT **132277-62-4P**
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation, crystal structure, and oxidation of)
RN 132277-62-4 CAPLUS
CN 2-Butenoic acid, 2-methyl-, (6,7,9,14,14a,15-hexahydro-1,5,10-trihydroxy-2,4,11,13-tetramethoxy-3,12,16-trimethyl-6,15-imino-5H-isoquino[3,2-b][3]benzazocin-9-yl)methyl ester, [5α,6α,9β(Z),14a.alpha.,15α]- (9CI) (CA INDEX NAME)

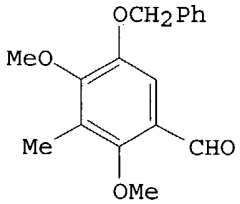
Relative stereochemistry.
Double bond geometry as shown.



L4 ANSWER 16 OF 22 CAPLUS COPYRIGHT 2004 ACS on STN
AN 1990:406006 CAPLUS
DN 113:6006
TI Total synthesis of (±)-saframycin A
AU Fukuyama, Tohru; Yang, Lihu; Ajeck, Karen L.; Sachleben, Richard A.
CS Dep. Chem., Rice Univ., Houston, TX, 77251, USA
SO Journal of the American Chemical Society (1990), 112(9), 3712-13
CODEN: JACSAT; ISSN: 0002-7863
DT Journal
LA English
OS CASREACT 113:6006
GI



I



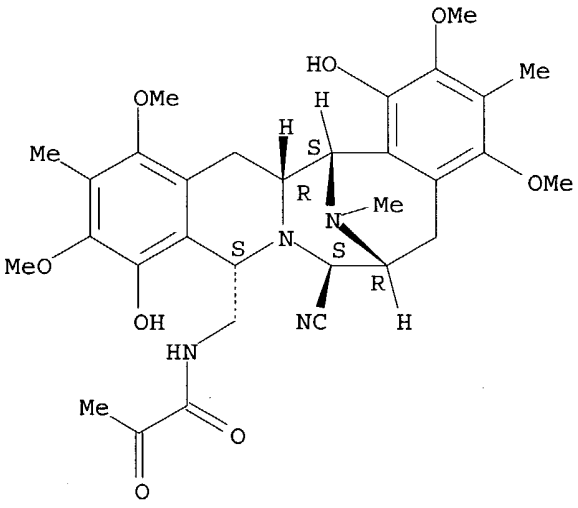
III

AB A highly efficient total synthesis of (±)-saframycin A (I) is reported. The dimeric nature of this unique bisquinone antitumor antibiotic allowed the use of the readily available, C2-sym. N,N'-diacetyl-2,5-piperazinedione (II) as the starting material. Condensation of II with the aldehyde III to form the arylidenepiperazinedione clearly introduced the nonsym. element needed to construct the bicyclic ring system. The present synthetic route is suitable for a large scale preparation of I and its analogs, giving 8.7% overall yield from II.

IT **127103-59-7P**
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(preparation and oxidation of)

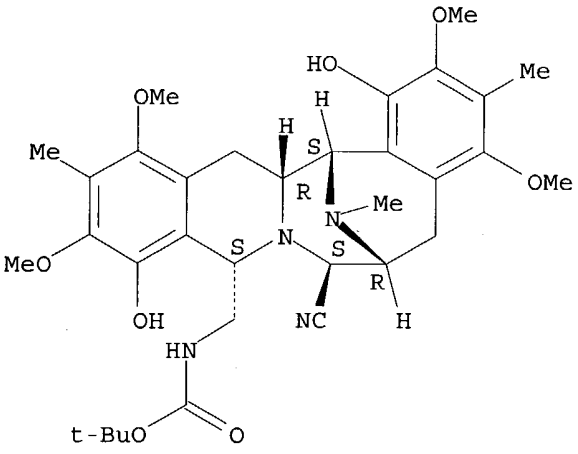
RN 127103-59-7 CAPLUS
CN Propanamide, N-[(7-cyano-6,7,9,14,14a,15-hexahydro-1,10-dihydroxy-2,4,11,13-tetramethoxy-3,12,16-trimethyl-6,15-imino-5H-isoquino[3,2-b][3]benzazocin-9-yl)methyl]-2-oxo-, (6α,7α,9β,14aα,15α)- (9CI) (CA INDEX NAME)

Relative stereochemistry.



IT **127103-58-6P**
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation, deblocking and acylation of)
RN 127103-58-6 CAPLUS
CN Carbamic acid, [(7-cyano-6,7,9,14,14a,15-hexahydro-1,10-dihydroxy-2,4,11,13-tetramethoxy-3,12,16-trimethyl-6,15-imino-5H-isoquino[3,2-b][3]benzazocin-9-yl)methyl]-, 1,1-dimethylethyl ester, (6α,7α,9β,14aα,15α)- (9CI) (CA INDEX NAME)

Relative stereochemistry.



L4 ANSWER 17 OF 22 CAPLUS COPYRIGHT 2004 ACS on STN
AN 1989:55972 CAPLUS
DN 110:55972
TI Manufacture of antitumor antibiotic saframycins with Myxococcus
PA Gesellschaft fuer Biotechnologische Forschung m.b.H., Switz.
SO Jpn. Kokai Tokkyo Koho, 19 pp.
CODEN: JKXXAF
DT Patent
LA Japanese
FAN.CNT 1

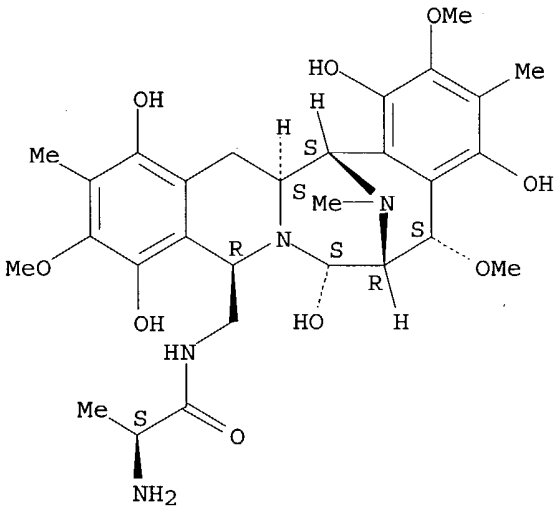
	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 63049092	A2	19880301	JP 1987-202012	19870814
	EP 262085	A1	19880330	EP 1987-810454	19870810
	R: AT, BE, CH, DE, ES, FR, GB, GR, IT, LI, LU, NL, SE				
	US 5023184	A	19910611	US 1987-85438	19870813
	IL 83532	A1	19920329	IL 1987-83532	19870813
	DK 8704239	A	19880216	DK 1987-4239	19870814
	AU 8776874	A1	19880218	AU 1987-76874	19870814
	AU 605783	B2	19910124		
	ZA 8706030	A	19880330	ZA 1987-6030	19870814
	AU 9062316	A1	19901213	AU 1990-62316	19900907
	AU 628643	B2	19920917		
PRAI	CH 1986-3294		19860815		

OS MARPAT 110:55972
GI

* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *

AB Antitumor antibiotic saframycin I (R1 = H, OH; R2 = H, acyl; A, B = C:O, C-OH; if A, B = C:O, the middle section of each of the broken lines would be double bonds; if A, B = C-OH, the 2 sides of each of the broken lines would be double bonds) is manufactured by fermentation with Myxococcus. Its pharmaceutical application is also disclosed. M. xanthus Mx x48 was cultivated in a 700 mL MD11.m medium with agitation and aeration for 50 h. I, predominantly I-Mx 1 and I-Mx 2, 700 mg were recovered from the culture fluid.
IT **116925-62-3P**
RL: BMF (Bioindustrial manufacture); BIOL (Biological study); PREP (Preparation)
(manufacture of, with Myxococcus xanthus, as tumor inhibitor)
RN 116925-62-3 CAPLUS
CN Propanamide, 2-amino-N-[(6,7,9,14,14a,15-hexahydro-1,4,7,10,13-pentahydroxy-2,5,11-trimethoxy-3,12,16-trimethyl-6,15-imino-5H-isoquino[3,2-b][3]benzazocin-9-yl)methyl]-, [5S-[5α,6β,7α,9β(R*),14aα,15β]]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.


OMe
HO
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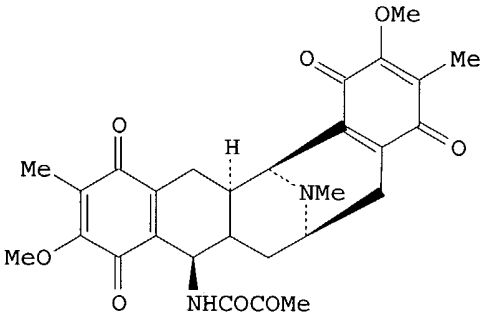
HO
H
HN
Me
S
O
NH2

L4 ANSWER 18 OF 22 CAPLUS COPYRIGHT 2004 ACS on STN
AN 1988:510118 CAPLUS
DN 109:110118
TI Stereoselective total synthesis of (±)-saframycin B
AU Kubo, Akinori; Saito, Naoki; Yamato, Hidekazu; Masubuchi, Kazunao; Nakamura, Madoka
CS Meiji Coll. Pharm., Tokyo, 154, Japan
SO Journal of Organic Chemistry (1988), 53(18), 4295-310
CODEN: JOCEAH; ISSN: 0022-3263
DT Journal
LA English
OS CASREACT 109:110118
GI

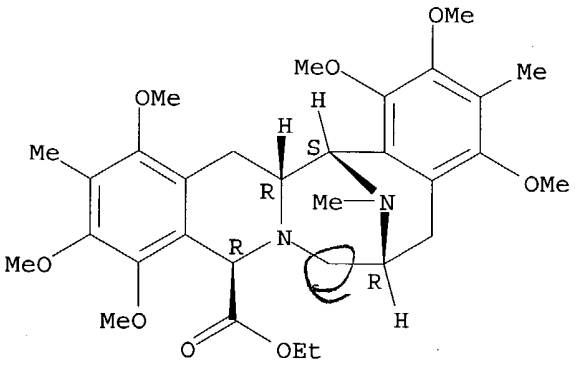


I

AB A 20-step total synthesis of (±)-saframycin B (I) from (Z)-1-acetyl-3-arylidene-6-(arylmethyl)-2,5-piperazinedione is described.

IT **112446-10-3P**
RL: PRP (Properties); SPN (Synthetic preparation); PREP (Preparation)
(preparation and crystal structure of)
RN 112446-10-3 CAPLUS
CN 6,15-Imino-5H-isoquino[3,2-b][3]benzazocine-9-carboxylic acid, 6,7,9,14,14a,15-hexahydro-1,2,4,10,11,13-hexamethoxy-3,12,16-trimethyl-, ethyl ester, (6α,9α,14aα,15α)- (9CI) (CA INDEX NAME)

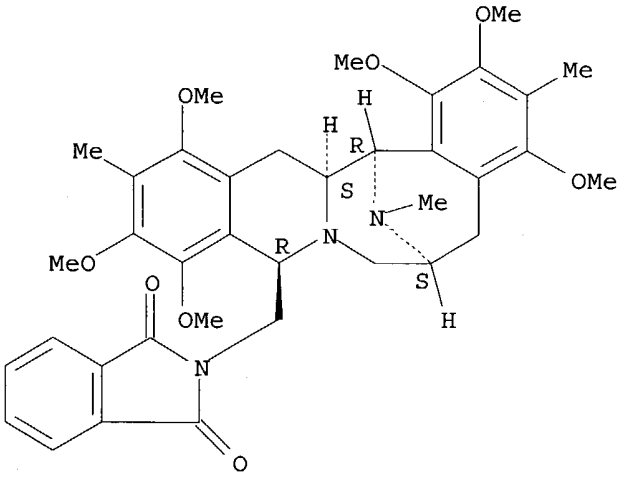
Relative stereochemistry.



IT **113083-37-7P**
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

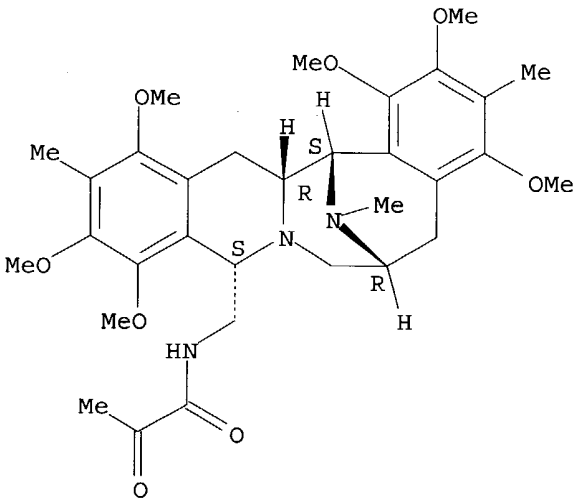
(preparation and hydrazinolysis of)
RN 113083-37-7 CAPLUS
CN 1H-Isoindole-1,3(2H)-dione, 2-[(6,7,9,14,14a,15-hexahydro-1,2,4,10,11,13-hexamethoxy-3,12,16-trimethyl-6,15-imino-5H-isoquino[3,2-b][3]benzazocin-9-yl)methyl]-, (6α,9β,14aα,15α)- (9CI) (CA INDEX NAME)

Relative stereochemistry.



IT **112446-03-4P**
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(preparation and oxidative demethylation of)
RN 112446-03-4 CAPLUS
CN Propanamide, N-[(6,7,9,14,14a,15-hexahydro-1,2,4,10,11,13-hexamethoxy-3,12,16-trimethyl-6,15-imino-5H-isoquino[3,2-b][3]benzazocin-9-yl)methyl]-2-oxo-, (6α,9β,14aα,15α)- (9CI) (CA INDEX NAME)

Relative stereochemistry.



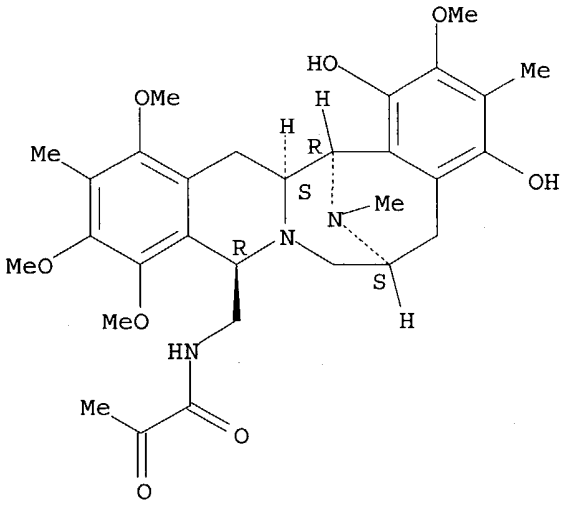
IT **115678-29-0P 115678-31-4P**

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(preparation and oxidation of)

RN 115678-29-0 CAPLUS

CN Propanamide, N-[(6,7,9,14,14a,15-hexahydro-1,4-dihydroxy-2,10,11,13-tetramethoxy-3,12,16-trimethyl-6,15-imino-5H-isoquino[3,2-b][3]benzazocin-9-yl)methyl]-2-oxo-, (6α,9β,14aα,15α)- (9CI) (CA INDEX NAME)

Relative stereochemistry.



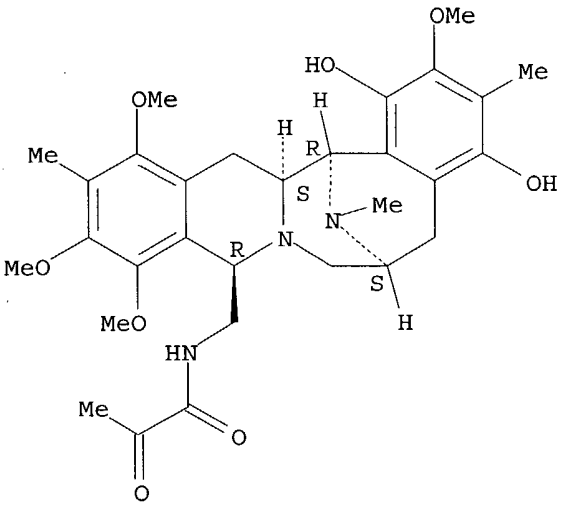
RN 115678-31-4 CAPLUS

CN Propanamide, N-[(6,7,9,14,14a,15-hexahydro-1,4-dihydroxy-2,10,11,13-tetramethoxy-3,12,16-trimethyl-6,15-imino-5H-isoquino[3,2-b][3]benzazocin-9-yl)methyl]-2-oxo-, monomethyl ether, (6α,9β,14aα,15.alpha.)- (9CI) (CA INDEX NAME)

CM 1

CRN 115678-29-0
CMF C30 H39 N3 O8

Relative stereochemistry.



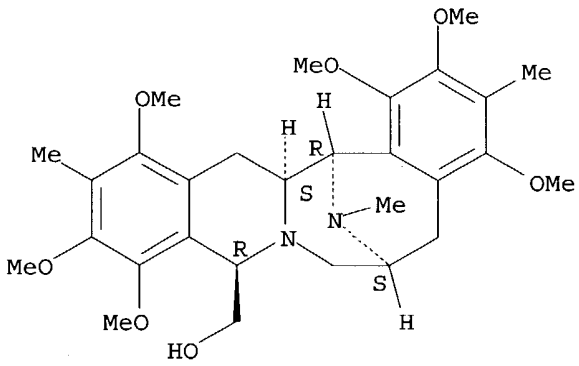
CM 2

CRN 67-56-1
CMF C H4 O

H_3C-OH

IT **112446-04-5P**
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(preparation and reaction of, with phthalimide)
RN 112446-04-5 CAPLUS
CN 6,15-Imino-5H-isoquino[3,2-b][3]benzazocine-9-methanol, 6,7,9,14,14a,15-hexahydro-1,2,4,10,11,13-hexamethoxy-3,12,16-trimethyl-, (6α,9β,14aα,15α)- (9CI) (CA INDEX NAME)

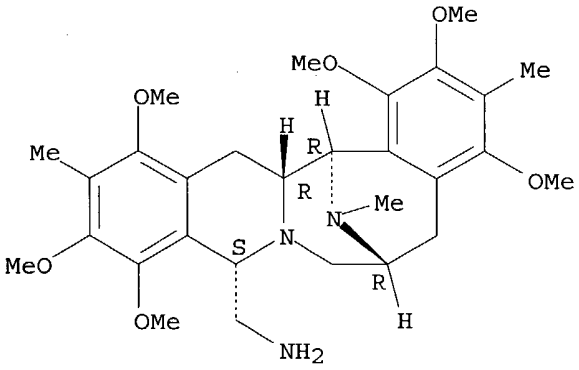
Relative stereochemistry.



IT **112995-89-8P**
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

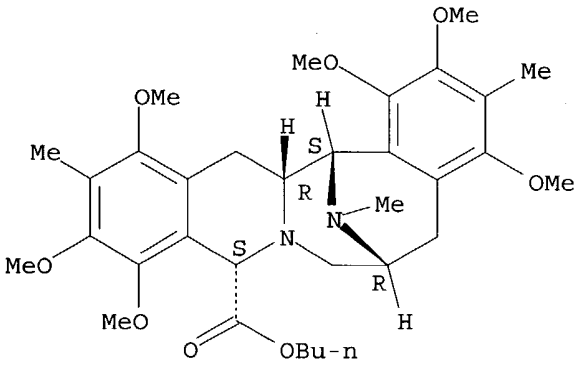
(preparation and reaction of, with pyruvoyl chloride)
RN 112995-89-8 CAPLUS
CN 6,15-Imino-5H-isoquino[3,2-b][3]benzazocine-9-methanamine, 6,7,9,14,14a,15-hexahydro-1,2,4,10,11,13-hexamethoxy-3,12,16-trimethyl-, (6α,9β,14aα,15β)- (9CI) (CA INDEX NAME)

Relative stereochemistry.



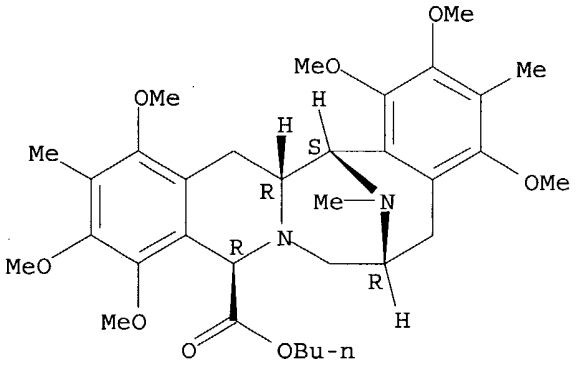
IT **112446-05-6P**
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(preparation and reduction of)
RN 112446-05-6 CAPLUS
CN 6,15-Imino-5H-isoquino[3,2-b][3]benzazocine-9-carboxylic acid, 6,7,9,14,14a,15-hexahydro-1,2,4,10,11,13-hexamethoxy-3,12,16-trimethyl-, butyl ester, (6α,9β,14aα,15α)- (9CI) (CA INDEX NAME)

Relative stereochemistry.



IT **112529-58-5P**
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(preparation and transesterification of)
RN 112529-58-5 CAPLUS
CN 6,15-Imino-5H-isoquino[3,2-b][3]benzazocine-9-carboxylic acid, 6,7,9,14,14a,15-hexahydro-1,2,4,10,11,13-hexamethoxy-3,12,16-trimethyl-, butyl ester, (6α,9α,14aα,15α)- (9CI) (CA INDEX NAME)

Relative stereochemistry.

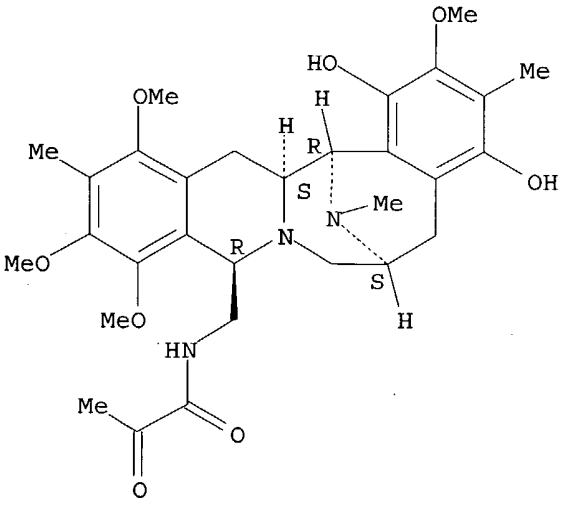


IT **115794-03-1P**
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation of)
RN 115794-03-1 CAPLUS
CN Propanamide, N-[[1(or 4)-(acetyloxy)-6,7,9,14,14a,15-hexahydro-2,4,10,11,13(or 1,2,10,11,13)-pentamethoxy-3,12,16-trimethyl-6,15-imino-5H-isoquino[3,2-b][3]benzazocin-9-yl]methyl]-2-oxo-, (6α,9β,14aα,15α)- (9CI) (CA INDEX NAME)

CM 1

CRN 115678-29-0
CMF C30 H39 N3 O8

Relative stereochemistry.



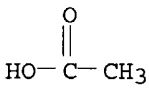
CM 2

CRN 67-56-1
CMF C H4 O

H_3C-OH

CM 3

CRN 64-19-7
CMF C2 H4 O2



L4 ANSWER 19 OF 22 CAPLUS COPYRIGHT 2004 ACS on STN
AN 1988:473253 CAPLUS
DN 109:73253
TI Preparation of 6,15-iminoisoquino[3,2-b][3]benzazocine derivatives as intermediates for an antitumor agent saframycin B
IN Kubo, Yotoku; Saito, Naoki
PA Japan
SO Jpn. Kokai Tokkyo Koho, 10 pp.
CODEN: JKXXAF
DT Patent
LA Japanese
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI JP 63002991	A2	19880107	JP 1986-144916	19860623
PRAI JP 1986-144916		19860623		

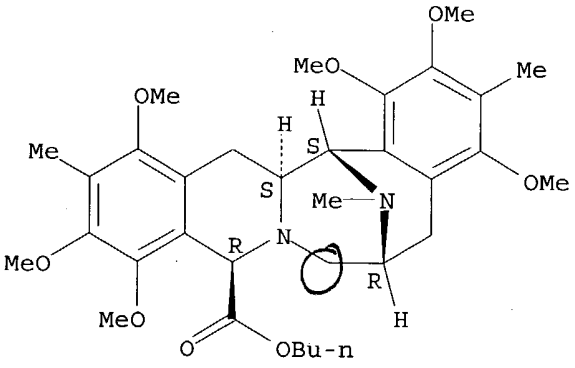
OS MARPAT 109:73253
GI

* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *

AB Isoquinolines I (R = CH2OH, CH2NH2, phthaloylmethyl) (II) are prepared from diazabicyclononane III. A mixture of III and K2CO3 in BuOH was treated with OHCCO2Bu at room temperature for 67 h and the concentrated reaction mixture was stirred in CF3CO2H at ice-cooled temperature for 1 h to give 70.2% isoquinoline IV, which was isomerized by treatment with Hg(OAc)2 in AcOH and then H2S(g), followed by NaBH4 treatment of the product in EtOH in the presence of NaHCO3 to give 70.6% I (R = CO2Bu) (V). A mixture of V and LiAlH4 in THF was refluxed for 2 h to afford 76.8% I (R = CH2OH), which was converted to saframycin B in 4 steps.

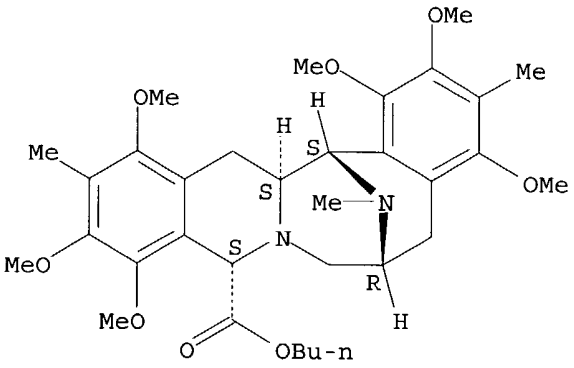
IT **115510-17-3P**
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(preparation and LAH reduction of, in preparation of saframycin B)
RN 115510-17-3 CAPLUS
CN 6,15-Imino-5H-isoquino[3,2-b][3]benzazocine-9-carboxylic acid, 6,7,9,14,14a,15-hexahydro-1,2,4,10,11,13-hexamethoxy-3,12,16-trimethyl-, butyl ester, [6R-(6α,9α,14aβ,15α)]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



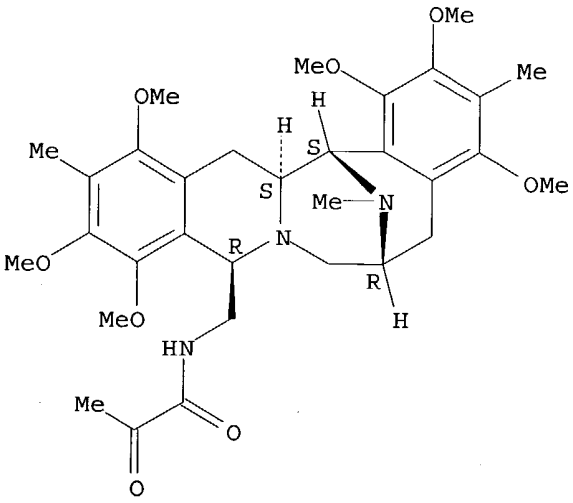
IT **115510-16-2P**
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(preparation and isomerization of, in preparation of saframycin B)
RN 115510-16-2 CAPLUS
CN 6,15-Imino-5H-isoquino[3,2-b][3]benzazocine-9-carboxylic acid, 6,7,9,14,14a,15-hexahydro-1,2,4,10,11,13-hexamethoxy-3,12,16-trimethyl-, butyl ester, [6R-(6α,9β,14aβ,15α)]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



IT **115510-18-4P**
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(preparation and oxidation of, saframycin B from)
RN 115510-18-4 CAPLUS
CN Propanamide, N-[(6,7,9,14,14a,15-hexahydro-1,2,4,10,11,13-hexamethoxy-3,12,16-trimethyl-6,15-imino-5H-isoquino[3,2-b][3]benzazocin-9-yl)methyl]-2-oxo-, [6R-(6α,9α,14aβ,15α)]- (9CI) (CA INDEX NAME)

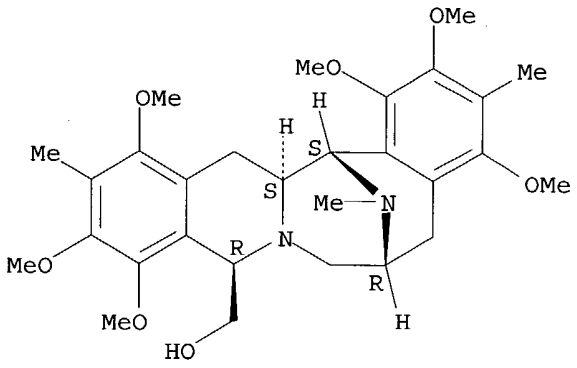
Absolute stereochemistry.



IT **115510-13-9P 115510-14-0P 115510-15-1P**
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation of, as intermediate for saframycin B)

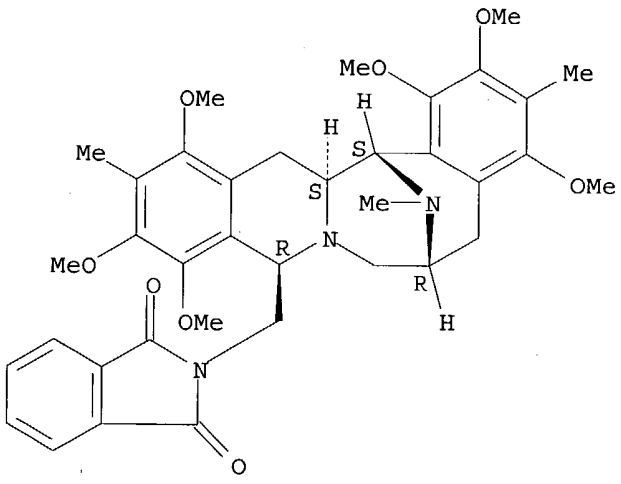
RN 115510-13-9 CAPLUS
CN 6,15-Imino-5H-isoquino[3,2-b][3]benzazocine-9-methanol, 6,7,9,14,14a,15-hexahydro-1,2,4,10,11,13-hexamethoxy-3,12,16-trimethyl-, [6R-(6α,9α,14aβ,15α)]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



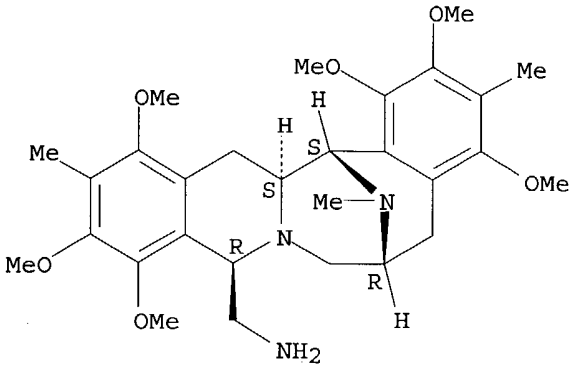
RN 115510-14-0 CAPLUS
CN 1H-Isoindole-1,3(2H)-dione, 2-[(6,7,9,14,14a,15-hexahydro-1,2,4,10,11,13-hexamethoxy-3,12,16-trimethyl-6,15-imino-5H-isoquino[3,2-b][3]benzazocin-9-yl)methyl]-, [6R-(6α,9α,14aβ,15α)]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



RN 115510-15-1 CAPLUS
CN 6,15-Imino-5H-isoquino[3,2-b][3]benzazocine-9-methanamine, 6,7,9,14,14a,15-hexahydro-1,2,4,10,11,13-hexamethoxy-3,12,16-trimethyl-, [6R-(6α,9α,14aβ,15α)]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.


OMe
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R
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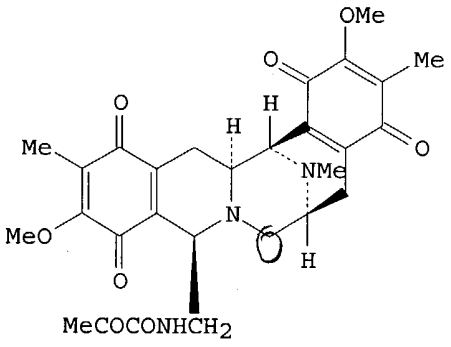
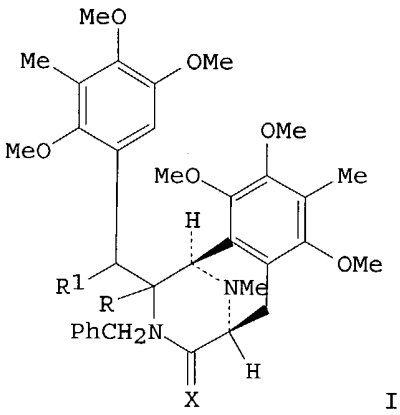
OMe
NH2

L4 ANSWER 20 OF 22 CAPLUS COPYRIGHT 2004 ACS on STN
AN 1988:112030 CAPLUS
DN 108:112030
TI Synthesis of saframycins. I. Total synthesis of (±)-saframycin B and its congeners
AU Kubo, Akinori; Saito, Naoki; Yamauchi, Reiko; Sakai, Shinichiro
CS Meiji Coll. Pharm., Tokyo, 154, Japan
SO Chemical & Pharmaceutical Bulletin (1987), 35(5), 2158-61
CODEN: CPBTAL; ISSN: 0009-2363
DT Journal
LA English
OS CASREACT 108:112030
GI



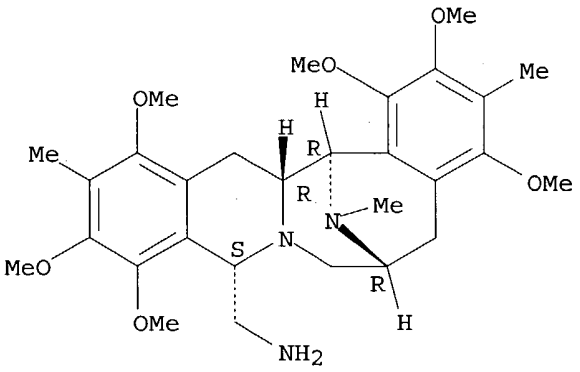
I



II

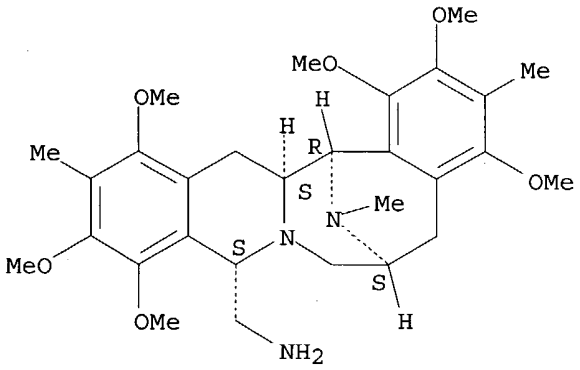
AB The total synthesis of saframycin B (I) was achieved from tricyclic lactam II (RR1 = bond; X = O). The key step is the stereoselective intramol. cyclization of the amino acetal II (R = R1 = H; X = H2). The structure of a pentacyclic intermediate was confirmed by x-ray crystallog.
IT **112995-89-8P 113083-38-8P**
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(preparation and acylation of, with pyruvoyl chloride)
RN 112995-89-8 CAPLUS
CN 6,15-Imino-5H-isoquino[3,2-b][3]benzazocine-9-methanamine, 6,7,9,14,14a,15-hexahydro-1,2,4,10,11,13-hexamethoxy-3,12,16-trimethyl-, (6α,9β,14aα,15β)- (9CI) (CA INDEX NAME)

Relative stereochemistry.



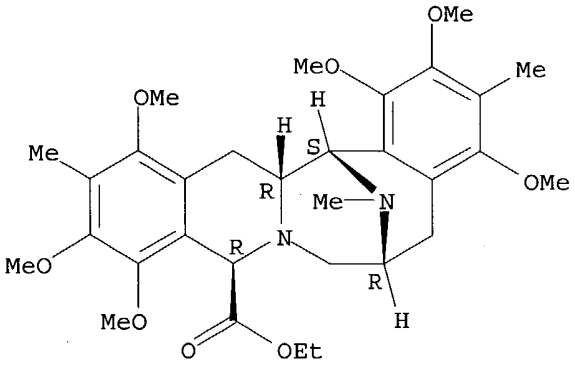
RN 113083-38-8 CAPLUS
CN 6,15-Imino-5H-isoquino[3,2-b][3]benzazocine-9-methanamine, 6,7,9,14,14a,15-hexahydro-1,2,4,10,11,13-hexamethoxy-3,12,16-trimethyl-, (6α,9α,14aα,15α)- (9CI) (CA INDEX NAME)

Relative stereochemistry.



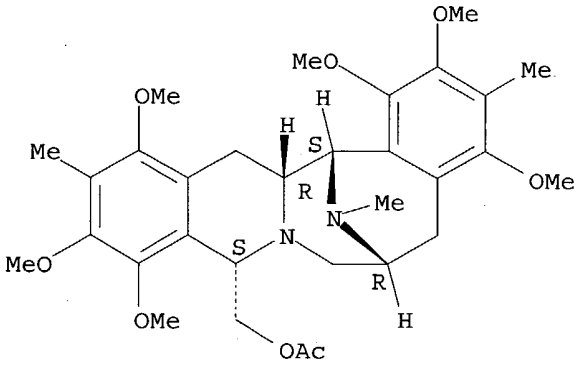
IT **112446-10-3P**
RL: PRP (Properties); SPN (Synthetic preparation); PREP (Preparation) (preparation and crystal structure of)
RN 112446-10-3 CAPLUS
CN 6,15-Imino-5H-isoquino[3,2-b][3]benzazocine-9-carboxylic acid, 6,7,9,14,14a,15-hexahydro-1,2,4,10,11,13-hexamethoxy-3,12,16-trimethyl-, ethyl ester, (6α,9α,14aα,15α)- (9CI) (CA INDEX NAME)

Relative stereochemistry.



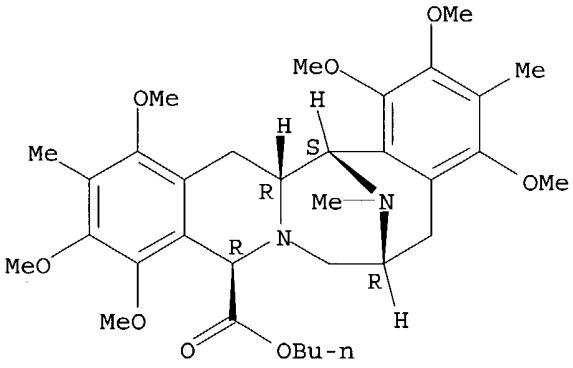
IT **112995-91-2P**
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(preparation and demethylation of)
RN 112995-91-2 CAPLUS
CN 6,15-Imino-5H-isoquino[3,2-b][3]benzazocine-9-methanol, 6,7,9,14,14a,15-hexahydro-1,2,4,10,11,13-hexamethoxy-3,12,16-trimethyl-, acetate (ester), (6α,9β,14aα,15α)- (9CI) (CA INDEX NAME)

Relative stereochemistry.



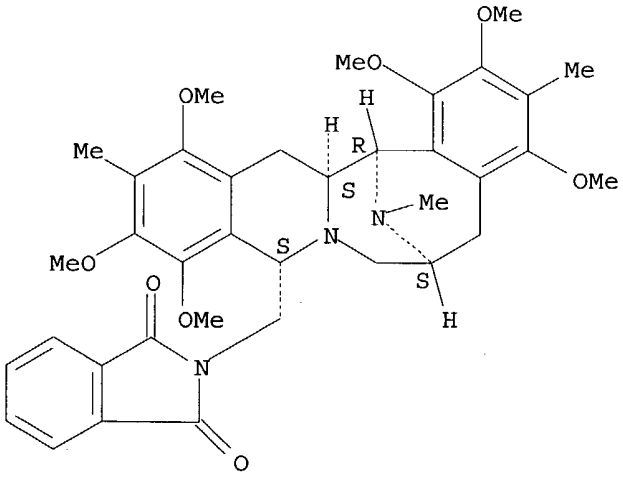
IT **112529-58-5P**
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(preparation and epimerization of)
RN 112529-58-5 CAPLUS
CN 6,15-Imino-5H-isoquino[3,2-b][3]benzazocine-9-carboxylic acid, 6,7,9,14,14a,15-hexahydro-1,2,4,10,11,13-hexamethoxy-3,12,16-trimethyl-, butyl ester, (6α,9α,14aα,15α)- (9CI) (CA INDEX NAME)

Relative stereochemistry.



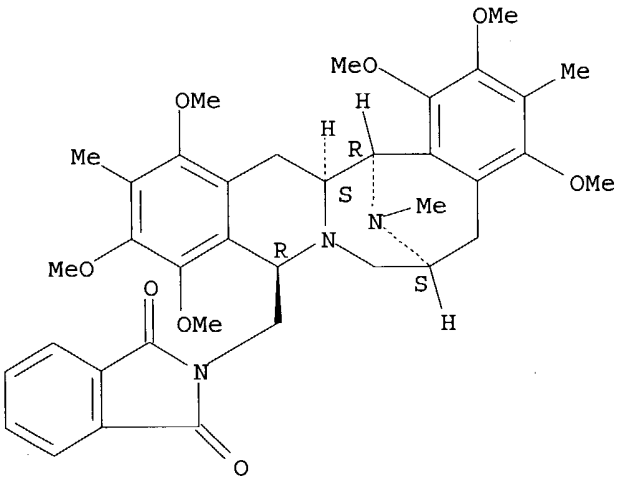
IT **112446-14-7P 113083-37-7P**
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(preparation and hydrazinolysis of)
RN 112446-14-7 CAPLUS
CN 1H-Isoindole-1,3(2H)-dione, 2-[(6,7,9,14,14a,15-hexahydro-1,2,4,10,11,13-hexamethoxy-3,12,16-trimethyl-6,15-imino-5H-isoquino[3,2-b][3]benzazocin-9-yl)methyl]-, (6α,9α,14aα,15α)- (9CI) (CA INDEX NAME)

Relative stereochemistry.



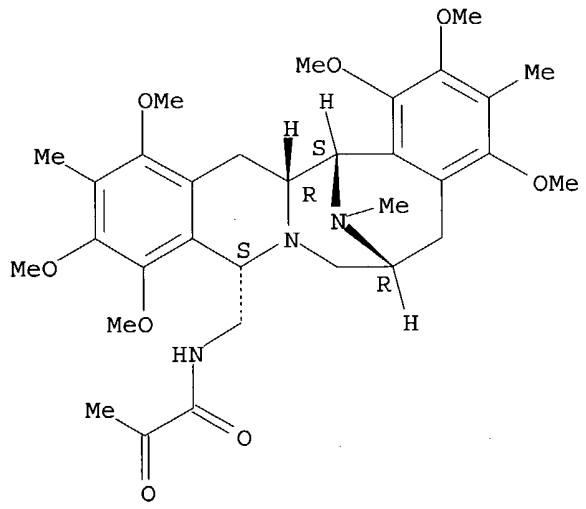
RN 113083-37-7 CAPLUS
CN 1H-Isoindole-1,3(2H)-dione, 2-[(6,7,9,14,14a,15-hexahydro-1,2,4,10,11,13-hexamethoxy-3,12,16-trimethyl-6,15-imino-5H-isoquino[3,2-b][3]benzazocin-9-yl)methyl]-, (6α,9β,14aα,15α)- (9CI) (CA INDEX NAME)

Relative stereochemistry.



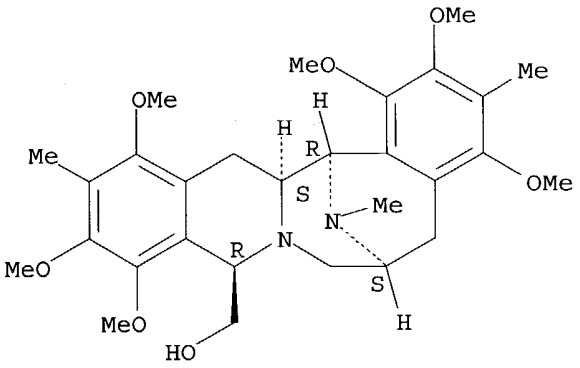
IT **112446-03-4P**
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(preparation and oxidation of)
RN 112446-03-4 CAPLUS
CN Propanamide, N-[(6,7,9,14,14a,15-hexahydro-1,2,4,10,11,13-hexamethoxy-3,12,16-trimethyl-6,15-imino-5H-isoquino[3,2-b][3]benzazocin-9-yl)methyl]-2-oxo-, (6α,9β,14aα,15α)- (9CI) (CA INDEX NAME)

Relative stereochemistry.



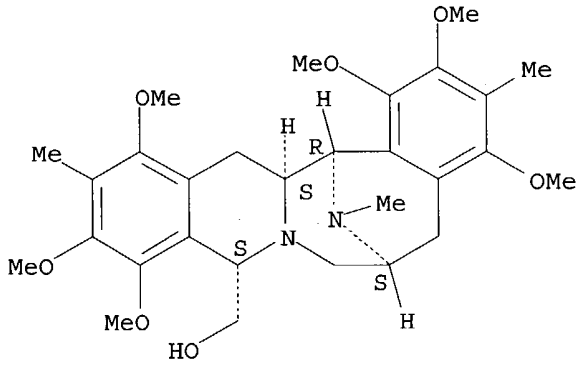
IT **112446-04-5P 112529-59-6P**
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(preparation and reaction of, with phthalimide)
RN 112446-04-5 CAPLUS
CN 6,15-Imino-5H-isoquino[3,2-b][3]benzazocine-9-methanol, 6,7,9,14,14a,15-hexahydro-1,2,4,10,11,13-hexamethoxy-3,12,16-trimethyl-, (6α,9β,14aα,15α)- (9CI) (CA INDEX NAME)

Relative stereochemistry.



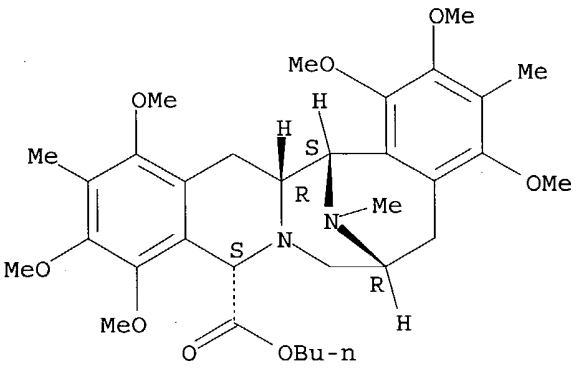
RN 112529-59-6 CAPLUS
CN 6,15-Imino-5H-isoquino[3,2-b][3]benzazocine-9-methanol, 6,7,9,14,14a,15-hexahydro-1,2,4,10,11,13-hexamethoxy-3,12,16-trimethyl-, (6α,9α,14aα,15α)- (9CI) (CA INDEX NAME)

Relative stereochemistry.



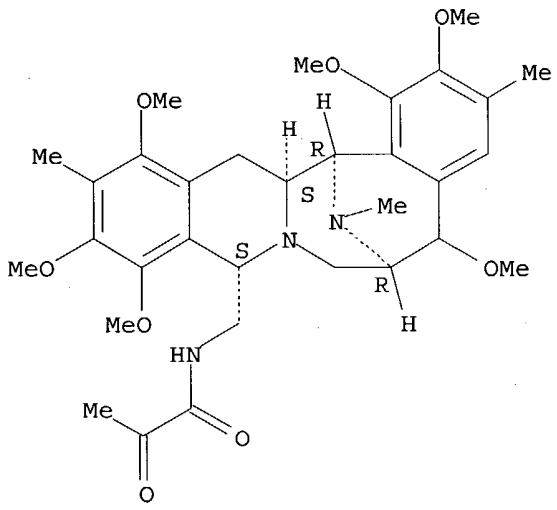
IT **112446-05-6P**
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(preparation and reduction of)
RN 112446-05-6 CAPLUS
CN 6,15-Imino-5H-isoquino[3,2-b][3]benzazocine-9-carboxylic acid, 6,7,9,14,14a,15-hexahydro-1,2,4,10,11,13-hexamethoxy-3,12,16-trimethyl-, butyl ester, (6α,9β,14aα,15α)- (9CI) (CA INDEX NAME)

Relative stereochemistry.

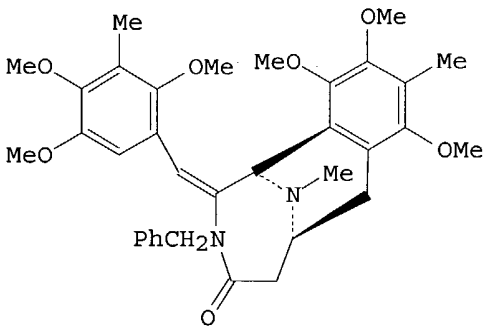


IT **112995-90-1P**
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation of)
RN 112995-90-1 CAPLUS
CN Propanamide, N-[(6,7,9,14,14a,15-hexahydro-1,2,4,1,11,13-hexamethoxy-3,12,16-trimethyl-6,15-imino-5H-isoquino[3,2-b][3]benzazocin-9-yl)methyl]-2-oxo-, (6α,9α,14aα,15α)- (9CI) (CA INDEX NAME)

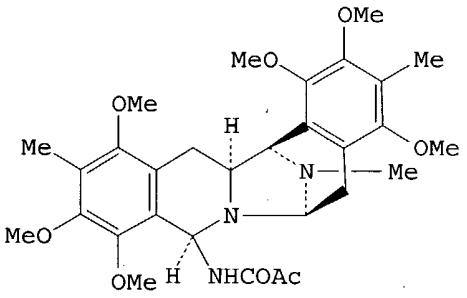
Relative stereochemistry.



L4 ANSWER 21 OF 22 CAPLUS COPYRIGHT 2004 ACS on STN
AN 1988:55713 CAPLUS
DN 108:55713
TI Studies on the total synthesis of saframycin B
AU Kobo, Akiyoshi; Saito, Naoki; Yamato, Hidekazu; Nakamura, Madoka
CS Meiji Coll. Pharm., Japan
SO Tennen Yuki Kagobutsu Toronkai Koen Yoshishu (1986), 28th, 465-72
CODEN: TYKYDS
DT Journal
LA Japanese
GI



II



III

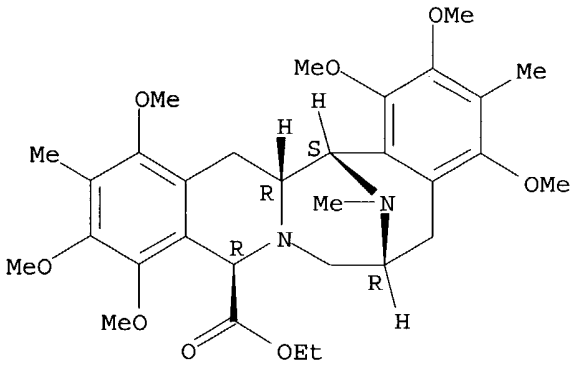
AB Saframycin B (I) which is an antitumor antibiotic, produced by Streptomyces lavendulae were prepared The preparation of safaramycin B intermediate II was reviewed. II was converted into the pentacyclic compound III in 10 steps. Oxidation of III with 10N HNO3 afforded I in 1% yield. The yield of I was raised to 41% by treatment with BBr3 at -78° followed by 10N HNO3.

IT **112446-10-3P**
RL: PRP (Properties); SPN (Synthetic preparation); PREP (Preparation)
(preparation and crystal structure of)

RN 112446-10-3 CAPLUS

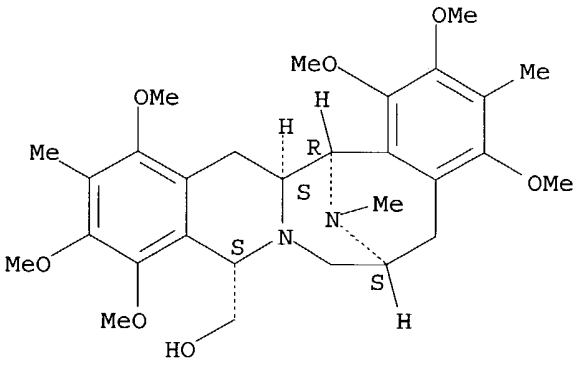
CN 6,15-Imino-5H-isoquino[3,2-b][3]benzazocine-9-carboxylic acid, 6,7,9,14,14a,15-hexahydro-1,2,4,10,11,13-hexamethoxy-3,12,16-trimethyl-, ethyl ester, (6α,9α,14aα,15α)- (9CI) (CA INDEX NAME)

Relative stereochemistry.



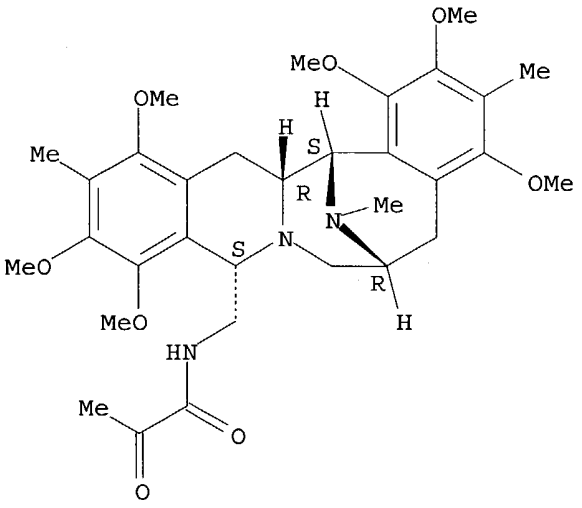
IT **112529-59-6P**
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(preparation and methylation of)
RN 112529-59-6 CAPLUS
CN 6,15-Imino-5H-isoquino[3,2-b][3]benzazocine-9-methanol, 6,7,9,14,14a,15-hexahydro-1,2,4,10,11,13-hexamethoxy-3,12,16-trimethyl-, (6α,9α,14aα,15α)- (9CI) (CA INDEX NAME)

Relative stereochemistry.



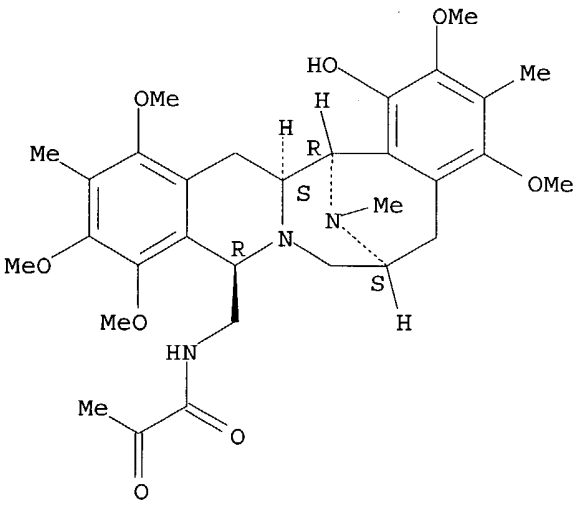
IT **112446-03-4P**
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(preparation and oxidative demethylation of)
RN 112446-03-4 CAPLUS
CN Propanamide, N-[(6,7,9,14,14a,15-hexahydro-1,2,4,10,11,13-hexamethoxy-3,12,16-trimethyl-6,15-imino-5H-isoquino[3,2-b][3]benzazocin-9-yl)methyl]-2-oxo-, (6α,9β,14aα,15α)- (9CI) (CA INDEX NAME)

Relative stereochemistry.



IT **112446-16-9P**
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(preparation and oxidation of)
RN 112446-16-9 CAPLUS
CN Propanamide, N-[(6,7,9,14,14a,15-hexahydro-1-hydroxy-2,4,10,11,13-pentamethoxy-3,12,16-trimethyl-6,15-imino-5H-isoquino[3,2-b][3]benzazocin-9-yl)methyl]-2-oxo-, (6α,9β,14aα,15α)- (9CI) (CA INDEX NAME)

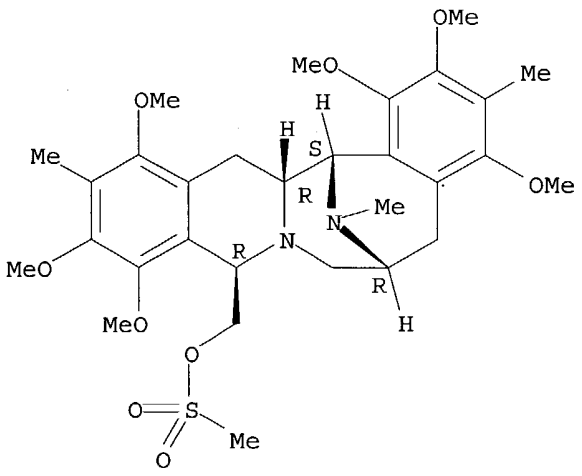
Relative stereochemistry.



IT **112446-11-4P**
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(preparation and reaction of, with azide)
RN 112446-11-4 CAPLUS
CN 6,15-Imino-5H-isoquino[3,2-b][3]benzazocine-9-methanol, 6,7,9,14,14a,15-hexahydro-1,2,4,10,11,13-hexamethoxy-3,12,16-trimethyl-,

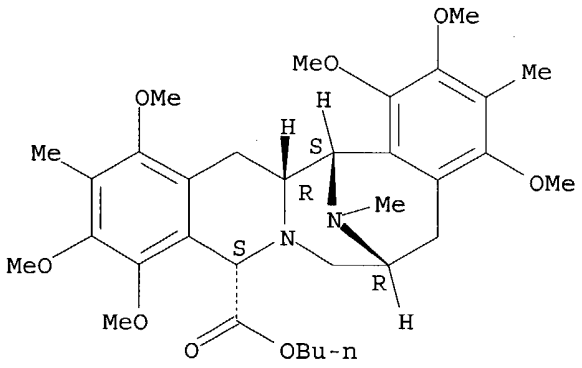
methanesulfonate (ester), (6α,9α,14aα,15α)- (9CI)
(CA INDEX NAME)

Relative stereochemistry.



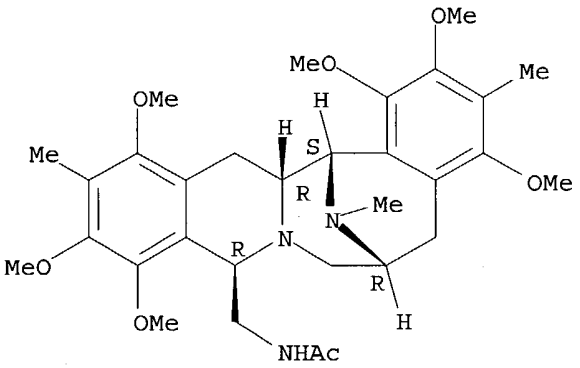
IT **112446-05-6P**
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(preparation and reduction of)
RN 112446-05-6 CAPLUS
CN 6,15-Imino-5H-isoquino[3,2-b][3]benzazocine-9-carboxylic acid, 6,7,9,14,14a,15-hexahydro-1,2,4,10,11,13-hexamethoxy-3,12,16-trimethyl-, butyl ester, (6α,9β,14aα,15α)- (9CI) (CA INDEX NAME)

Relative stereochemistry.



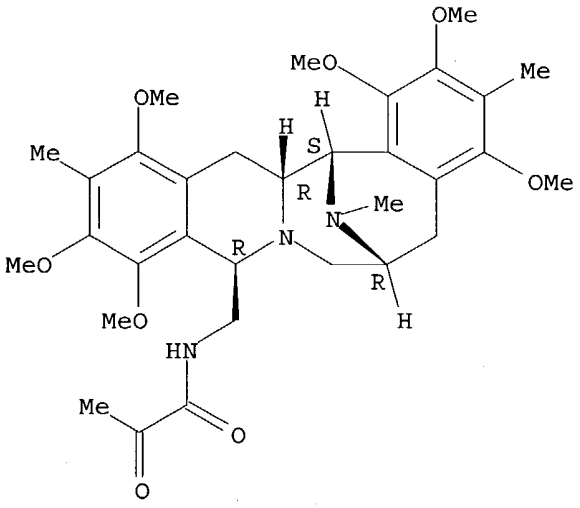
IT **112446-13-6P 112529-60-9P**
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation of)
RN 112446-13-6 CAPLUS
CN Acetamide, N-[(6,7,9,14,14a,15-hexahydro-1,2,4,10,11,13-hexamethoxy-3,12,16-trimethyl-6,15-imino-5H-isoquino[3,2-b][3]benzazocin-9-yl)methyl]-, (6α,9α,14aα,15α)- (9CI) (CA INDEX NAME)

Relative stereochemistry.



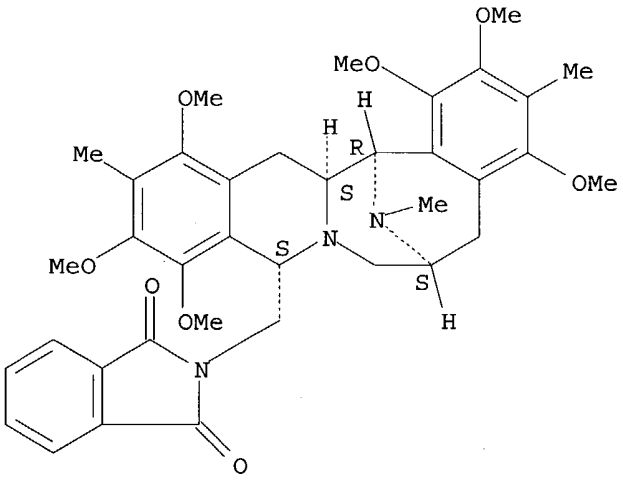
RN 112529-60-9 CAPLUS
CN Propanamide, N-[(6,7,9,14,14a,15-hexahydro-1,2,4,10,11,13-hexamethoxy-3,12,16-trimethyl-6,15-imino-5H-isoquino[3,2-b][3]benzazocin-9-yl)methyl]-2-oxo-, (6α,9α,14aα,15α)- (9CI) (CA INDEX NAME)

Relative stereochemistry.



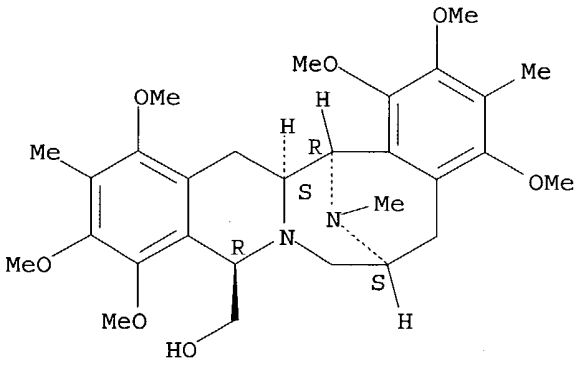
IT **112446-14-7P**
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(preparation, hydrazinolysis, and acylation of)
RN 112446-14-7 CAPLUS
CN 1H-Isoindole-1,3(2H)-dione, 2-[(6,7,9,14,14a,15-hexahydro-1,2,4,10,11,13-hexamethoxy-3,12,16-trimethyl-6,15-imino-5H-isoquino[3,2-b][3]benzazocin-9-yl)methyl]-, (6α,9α,14aα,15α)- (9CI) (CA INDEX NAME)

Relative stereochemistry.



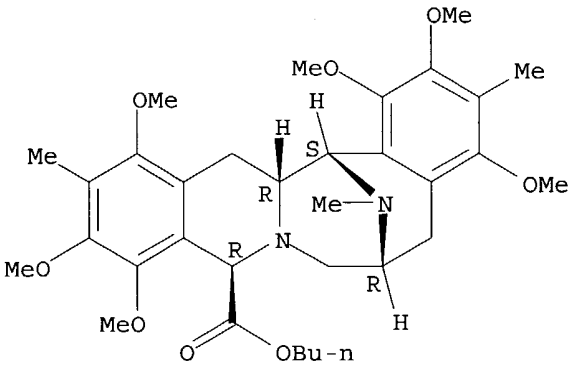
IT **112446-04-5P**
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation, reaction with phthalimide, hydrazinolysis, and acylation of)
RN 112446-04-5 CAPLUS
CN 6,15-Imino-5H-isoquino[3,2-b][3]benzazocine-9-methanol, 6,7,9,14,14a,15-hexahydro-1,2,4,10,11,13-hexamethoxy-3,12,16-trimethyl-, (6α,9β,14aα,15α)- (9CI) (CA INDEX NAME)

Relative stereochemistry.



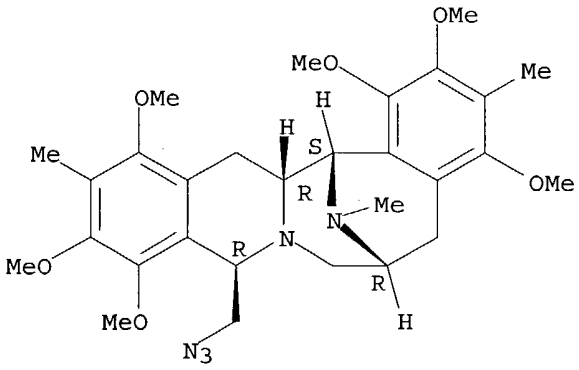
IT **112529-58-5P**
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(preparation, reduction, and isomerization of)
RN 112529-58-5 CAPLUS
CN 6,15-Imino-5H-isoquino[3,2-b][3]benzazocine-9-carboxylic acid, 6,7,9,14,14a,15-hexahydro-1,2,4,10,11,13-hexamethoxy-3,12,16-trimethyl-, butyl ester, (6α,9α,14aα,15α)- (9CI) (CA INDEX NAME)

Relative stereochemistry.



IT **112446-12-5P**
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(preparation, reduction, and N-acetylation of)
RN 112446-12-5 CAPLUS
CN 6,15-Imino-5H-isoquino[3,2-b][3]benzazocine, 9-(azidomethyl)-6,7,9,14,14a,15-hexahydro-1,2,4,10,11,13-hexamethoxy-3,12,16-trimethyl-, (6α,9α,14aα,15α)- (9CI) (CA INDEX NAME)

Relative stereochemistry.



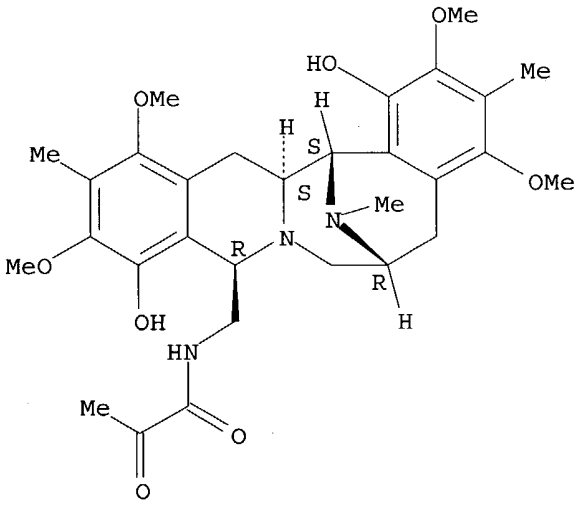
L4 ANSWER 22 OF 22 CAPLUS COPYRIGHT 2004 ACS on STN
AN 1982:544641 CAPLUS
DN 97:144641
TI Stereocontrolled total synthesis of (±)-saframycin B
AU Fukuyama, Tohru; Sachleben, Richard A.
CS Dep. Chem., Rice Univ., Houston, TX, 77251, USA
SO Journal of the American Chemical Society (1982), 104(18), 4957-8
CODEN: JACSAT; ISSN: 0002-7863
DT Journal
LA English
GI

* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *

AB The first total synthesis of a novel antibiotic, (±)-saframycin B (I) is reported. The benzobicyclo[3.3.1] system II (R = CO2CH2Ph) was constructed from a readily available, diastereomeric mixture of amino acid derivs. III in three steps in 74% yield. Conversion of II to the pentacyclic compound IV was carried out in a six-step sequence in 41% overall yield. Oxidation of IV with ceric ammonium nitrate gave 37% I.

IT **82638-80-0P**
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(preparation and oxidation of)
RN 82638-80-0 CAPLUS
CN Propanamide, N-[(6,7,9,14,14a,15-hexahydro-1,10-dihydroxy-2,4,11,13-tetramethoxy-3,12,16-trimethyl-6,15-imino-5H-isoquino[3,2-b][3]benzazocin-9-yl)methyl]-2-oxo-, (6α,9α,14aβ,15α)- (9CI) (CA INDEX NAME)

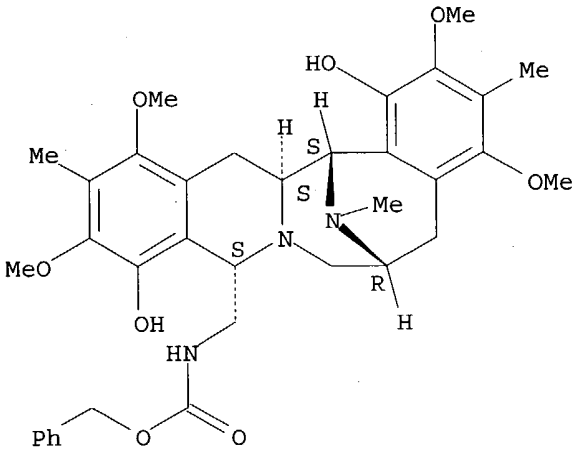
Relative stereochemistry.



IT **82660-66-0P**
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation of)
RN 82660-66-0 CAPLUS
CN Carbamic acid, [(6,7,9,14,14a,15-hexahydro-1,10-dihydroxy-2,4,11,13-

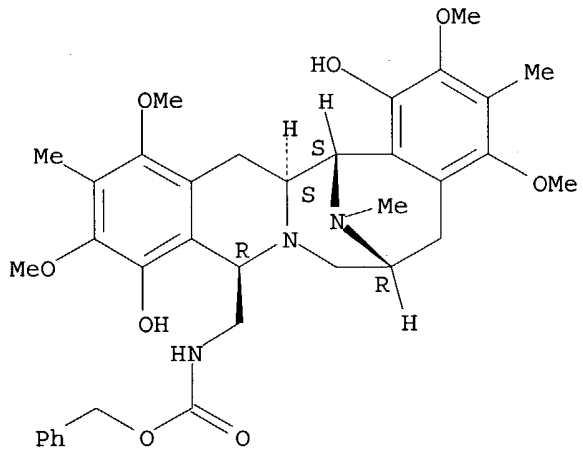
tetramethoxy-3,12,16-trimethyl-6,15-imino-5H-isoquino[3,2-b][3]benzazocin-9-yl)methyl]-, phenylmethyl ester, (6α,9β,14aβ,15α)- (9CI) (CA INDEX NAME)

Relative stereochemistry.



IT **82638-79-7P**
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation, deblocking, and acylation of)
RN 82638-79-7 CAPLUS
CN Carbamic acid, [(6,7,9,14,14a,15-hexahydro-1,10-dihydroxy-2,4,11,13-tetramethoxy-3,12,16-trimethyl-6,15-imino-5H-isoquino[3,2-b][3]benzazocin-9-yl)methyl]-, phenylmethyl ester, (6α,9α,14aβ,15α)- (9CI) (CA INDEX NAME)

Relative stereochemistry.



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